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### MADRAS FISHERIES BUREAU. BULLETIN No. 9.

### FISHERY STATISTICS AND INFORMATION, WEST AND EAST COASTS.

MADRAS PRESIDENCY.

COMPILED BY

V. GOVINDAN, B.A., F.Z.5., Assistant Director of Fisheries.

MADRAS

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

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### FISHERY STATISTICS AND INFORMATION, WEST AND EAST COASTS, MADRAS PRESIDENCY.

### INTRODUCTION.

THE present Bulletin is a first attempt to display with some degree of accuracy certain statistics relating to the fishing popu-

lation of the Madras Presidency.

Scattered along the coasts of the Presidency are 118 fish-curing yards in which Government issues duty-free salt to the fish-curers, but, except in minor matters, does not ordinarily interfere with the curers' methods. Each yard is in charge of an officer of the Salt Department with authorities over him and subordinates under him, and, during the last few years, note-books have, at the instance of the Fisheries Department, been compiled by these curing-yard officials, containing information on the number, methods, material, condition, etc., of the local fisher-folk. This information has the advantage that it is obtained either from the fisher-folk themselves or from methods and facts under the eyes of the compilers.

On the other hand there are several reasons why this information is often both imperfect and even incorrect, for much of it has depended on the statements of persons unaccustomed to accurate statistical work and was gathered by persons having no great facilities for or special interest in statistics. Hence in preparing the statistics and facts contained in this Bulletin the information contained in the note-books has had to be laboriously checked, modified, and amplified by personal enquiry and observation; this task was entrusted to Mr. V. Govindan, B.A., Assistant Director of the Department, whose personal knowledge of the fisher-folk and their circumstances and whose interest in them and their development specially fitted him for the work. The necessity first for laborious compilation from the rather obscure and often imperfect note-books and then for personal verification and amplification of the records has caused much delay in the production of this Bulletin since it was first taken up by order of Government in 1914. But this verification has added greatly to the value of the statistics which, so far as they go, may now be considered fairly reliable; the economic information has been very carefully examined and amplified by the Assistant Director.

The Bulletin is divided into two parts—one for the West and one for the East coast; each part comprises five sections, viz.—

- (I) Fish-curing yards, number of ticket-holders, markets.
- (2) Number of boats engaged in fishing.

(3) The various kinds of nets.(4) Methods of curing fish.

(5) Economic condition of fisher-folk and curers,

It is, of course, clear that the statistics now presented are wholly incomplete and wanting in much that is desirable. This is due simply to the fact that this Department or Bureau, as at present constituted and functioning, is industrial and not statistical; almost the whole of its duties at present are concerned with developing fisheries on the industrial side and it has no machinery for the collection or collation of statistics. Moreover, it requires but slight thought to show that the collection of statistics and even of facts in this country is very difficult and very different from the same

duty in Western countries.

In Great Britain (excluding Ireland) the Fishery Departments are chiefly statistical and regulative and not industrial (except in the one matter of crown brands for Scotch herring), just because the men engaged in the direct fishing and allied industries not only know their own business and interests most thoroughly but have initiative in the highest possible degree, and are infinitely better acquainted with their own industries and interests than any Government or Board can be. Moreover, in consequence of the fishery organization, the gathering of statistics is a simple matter; the boats are large and chiefly issue, often under the fleet system. from a few large ports, and are owned and run by intelligent businessmen, who moreover know that statistics are gathered not for fiscal but for public purposes. Hence all that has to be done is to appoint an Inspector at each port-in England often a businessman himself—who simply receives from the various owners notes of their catches which he compiles into a daily report; the fish markets, moreover, are perfectly organized and it is easy to ascertain every pound of fish landed.

Now here in India everything is exactly the opposite. First, our fishing industry is in the most primitive condition quite undeveloped in any of the modern methods and allied industries, bound by custom and ignorance, and entirely without initiative in new departures; it is the Government officers only who have a larger knowledge and a certain degree of initiative, and it is, at present, for them to lead the industry and the men, as has been done in the oil and guano development, in canning and various other curing and cultural methods, and as will be done shortly in matters of capture; this is the raison d'être, and this only, of the Government

Department. Hence we are industrial and not statistical.

Secondly, the collection of statistics except of almost fixed and of readily visible and ascertainable matters (such as the population, number of boats, etc.) is almost impossible here, and the statistics, if collected, would be of little value and probably misleading, while the collection, costly in itself, would cause the worst suspi-

cions among the fisher-folk who have never yet been taxed.

We have some 1,700 miles of sea coast exclusive of estuaries and indentations, and every mile, so to say, has its fishing village or hamlet with few or many canoes, catamarans, etc., which go out by night or day catching sometimes a few, sometimes a good load, of one fish or another, which they bring to shore and sell off on the beach at once to local purchasers who consume or run the fish inland as soon as possible before it is further decomposed. The fishermen themselves, moreover, have no idea of weights; they speak generally in terms of baskets or divisions of boats (of great!v varying local sizes) where fish are abundant or in numbers where the fish are large or few. Moreover, in addition to the boats, there

are very numerous shore-seins, casting nets, etc., the produce of which comes in at any time. Hence it is clear that even an official in each hamlet could not get trustworthy or even approximate statistics, since he could not be always on the spot; and an official in each village is unthinkable. Moreover, owing to ignorance in part, but far more owing to suspicion and fear of taxation, the returns of quantities caught would be absolutely misleading and mischievous.

These difficulties may gradually be overcome, but meanwhile they exist and tend to render statistical work both difficult and inaccurate; hence faults in the present Bulletin both in fact and in omission.

A body of information based on questionnaires issued several years ago to various authorities all over the Presidency is in my possession, and it is hoped to collate and digest it for a further issue in the near future.

TANUR, 20th March 1916. F. A. NICHOLSON,

Honorary Director.

### STATISTICS RELATING TO WEST COAST.

### STATISTICS RELATING TO WEST COAST.

SECTION I...

### WEST COAST-SOUTH CANARA DISTRICT.

FISH-CURING yards, number of ticket-holders, markets, etc.

		Markets to which salted,	Nu	Ave	rage o	ket-l lurin enniu	g the	rs	ntity of annually -14.	
Nu	of yard.	cured, etc., fish supplied.	1885-89.	1890-94	1895-99.	1900-04.	1905-09.	1910-13.	Average quantity of fish cured annually during 1910-14.	
ı.	Gangolli	Cooncapoor, interior villages, Mangalore and		6	9	18	31	38	MDS. 19,164	
2,	Hangarkaita	territory and interior	18	; 6	14	29	27	43	14,969	
3.	Tonse	villages.  Mysore, Colombo and interior villages.	·			24	55	54	9,226	
4.	Malpe I	Udipi, Mysore, Colombo	79	81	147	280	93	63	38,670	
5.	Do. 11	and Bombay Presidency. Colombo, Bombay, Mysore and local weekly	Som	a M:	irkala yard.		vate	1	2,948	
б.	Udiavat	markets. Colombo, Udipi and Bommarbittu within 15	;	·	:	62	84	69	10,567	
7.	Mulki	miles. Colombo, Bombay, Mysore and Coorg.	·	•••	11	. 18	22	22	3,312	
8.	Hosabettu	Colombo and interior villages.	, O <sub>1</sub>	pened	lonly	in t	909.	13	4,072	
9.	Bukkapatnam		· 6	13	24	28	26	17	3,830	
10.	Mangalore	Local markets, Colombo, Mysore and Coorg.			18	52	24	21	7,943	
11.	Ullal	: Colombo, Mysore, Coorg and interior villages.	15	18	20	23	27	24	6.878	
12,	Manjeshwar *	Colombo, Malabar and local markets within 40 miles.		22	38	17	11	13	8,436	
13.	Kumbla	Colombo and interior   markets within 10 miles.		26	42	27	15	14	2,293	
14.	Kasaragod	Colombo, interior markets				26	16	14	5,013	
•		Colombo, Coorg and interior villages.		45	41	40	39	39	4,343	
16.	Hosdrug	Colombo, Coorg, interior		16	18	15	15	22	7,145	
17.	Taikadapara	Tellicherry and local sale.	ļ	. •••	÷ 9	16	13	15	2,408	

People of adjacent villages sell their catches to the curers.
 Four hundred men regularly go for fishing.

### SECTION I-cont.

### WEST COAST-MALABAR DISTRICT.

FISH-CURING yards, number of ticket-holders, markets, etc.

Nu	niber and name of yard.	Markets to which salted fish, etc., supplied.		<del></del>		enniu	m.		annit ast ast -f4.
	or yasu.		•	•		- '	'		2 mg
		nai, etc., auppned.	1885-89.	1890-94.	1895-99.	1900-04.	1905-09.	1910-13.	Average quantity of fish cured annually during last five years 1910-14.
				!   .					MDs.
ı.	Madai, Paz- hayangadi.	Local, South Malabar, South Canara and East Coast.	5	6	10	24	27	28	19,887
2.	Matul (Azhik- kal).	Markets within 20 miles.	•••	•••	<sup>i</sup>	27	18	15	3,480
3⋅	Baliapatam	Mostly local (12 miles radius) and Colombo.	31	33	28	29	26	29	2,555
4.	Cannanore	Local (12 miles radius) Wynaad, Colombo and Tamil districts.		88	85	74	69	68	16,303
5	Tellicherry	Neighbouring villages and towns, Coorg, Wynaad, Colombo and Tamil districts.	78	97	93	94	83	81	. 36,214 :
6.	Kurichi	Local villages and towns, Coorg, Wynaad, Colombo and Tamil districts.		•••	11	15	17	11	622
7.	Madakara	Local, Wynaad, Ernad, East Coast and Ceylon.	15	15	17	13	11	9	11,112
	Badagara	Local markets, interior villages and Colombo.	16	17		18	5 <b>2</b>	44	17,903
9.	Quilandi	Local markets within 20 miles, interior districts and Colombo.	27	39	42	48	53	52	33,814
	Elathur	markets (e.g., Calicut and Palghat) and Coim- batore.	9	10	11	13	19	21	3,210
	Puthiappa	Do. Local, interior districts	15	19	24	29 66	36	36	5,704
12.	Calicut, North.	Local, interior districts and Colombo.	•••	72	80	60	51	45	22,123
13.	Do. South,	Local markets and Feroke.	11	19	26	24	24	22	6,110
I4.	Beypore, North.	Local markets, Calicut and Feroke.	15	13	15	16	14	15	2,091
15.	Do. South.	Neighbouring villages and Calicut.	17	. 13	13	15	17	25	6,910
16.	Parappanan- gadi.	Shandies within 30 miles radius, and interior districts.		 	••• 1 - i	33	37	3,8	44,117
17.	Tanur	Markets within 50 miles in the district, interior districts and Ceylon.	19	:	49	72	87	83	75,210
18.	Paravanna	Neighbouring shandies, interior districts and Colombo.	rı	15	17	22	30	22	10,723

### SECTION I-cont.

### WEST COAST-MALABAR DISTRICT-cont.

Fish-curing yards, number of ticket-holders, markets, etc.-cont.

			Nu		of tierage	for e	ach	ers-	ntity of y cured st five
Number and na of yard.	me	Markets to which salted fish, etc., supplied.	1885-89.	1890-94.	1895-99.	1900-04.	1905-09.	1910-13.	Average quanti fish annually during last years 1910-14.
19. Kuttai	···.	Local markets and shandies within 13 miles and East Coast.	42	51	45	51	48	39	MDS. 15,573
20. Ponnani		Many markets in the district, interior districts	•••			25	24	22	24,765
21. Pudu Ponnar	ai.	and Colombo.  Markets within 25 miles radius and interior districts.	•••	30	34	47	37	33	8,401
22. Velliangode	•••	Markets in the neighbour- hood and Travancore and interior districts.	11	17	19	22	29	28	12,090
23. Palappatti	•••	Markets in the district, Colombo and interior districts.	43	42	39	41	43	42	15,111
24. Mannalam- kunnu.		Neighbouring markets, interior districts and Colombo.		27	31	33	34	31	8,009
25. Edakazhiyur	*	Local demand, interior districts and Ceylon.	47	52	36	37	38	33	14,252
26. Blangad *	•••	Local (within 15 miles radies), interior districts, Cochin, Travancore and Colombo.		*** I	•••	41	14	47	17,856
27. Chavakkad		Cochin State, Colombo	52	60	64	65	66	65	17,936
28. Vadanapalli	···		•••	40	48	47	4 <b>1</b>	35	7,832
29. Kotimbi Kad puram.	ap-	Local shandles (5 miles radius), Cochin and Travancore States.	•••	}		25	26	18	4,380
30. Kurikuzhi		Local markets and Cochin States.			10	22	23	19	6,945
31. Bimbalur		Local markets (8 miles radius), and Cochin	•••		11	12	15	13	4,283
32. Cochin +		Local markets and Colombo.	5	13	16	17	16	14	596

<sup>\* 500</sup> males go for fishing.

<sup>†</sup> Some of the curers come from Colombo.

### SECTION 11.

# WEST COAST—SOUTH CANARA DISTRICT.

## NUMBER of boats engaged in fishing.

			10					
	Remarks.		Large boats used for Rampaninet fishing.	The large boats are those used for Rampani net fishing and are provided with	outrigger.	Some of these large boats are Pattamars or Machwas that come from Bombay	Presidency for drift net fishing on this coast and others are	Rampani boats.
	Weight of fish that can be carried.		Cloth sails. 2-3 tons	2—3 tons	::	:::	::	::
	Sails.		Cloth sails.				: :	::
Description of boats.	Cost.	RS.	200—300 175—350 50:100	250 360 30 - 60	275	200—500 150—300 50	150-200	150-200 100-150
Oescriptio	Стеч.	MEN.	8 4 8 4	13 4 3-4		12-13 6-8 2-3	13 13	EL 200
	Depth.	FEET.	44 :	24 14-2	::	2-24	<b>₩</b> 8	איני
	Length. Width. Depth.	FEET.	3 - 3	21.	::	6-10 3-34 24	7 of	04
	Length.	FEET.	25—40 25—30 10—20	40 30 10-20	::	36—40 25—30 20	36	36 27
Number of	Built. up boats.		<sub>4</sub> : :	∞ ::	4:	<sup>8</sup> : :		· :
Num	Dug- Built, out up canoes, boats.		36	: <sub>84</sub> 4	:00	: % %	. 4	35.
	Large or small.		Large, Medium. Small,	Large. Medium. Small.	Large. Small,	Large. Medium. Small.	Large, Small.	Large. Small.
	널		:	:	:	:	:	:
	Name of yard.		:	ılta	:	:	:	:
	Name		Gangoli	Hangarkatta	Tonse	Malpe I	Malpe II	Udiavar
·Ie	Serial numb		ы	**	m	4	Ϋ́	\$

3—5 tons Some of these are built z tons. up boats used for	nampani nsping.		Some of the boats are Machwas of Ratna- giri, Rajpur and	Devaguda (Bombay Presidency) who re- ceive advances from	come here to carry on drift net fishing	during the season.		****		
3—5 tons z tons.	::	2-3 tons. 2 tons.	::	::	::	::	::		:::	::
6. 6	2 2	2 2	2 2		::	::	::			2 2
200—300 50—100	300500	500-500	200—400 50—200	175-250	200-600	200-400	400	350-500 100-350 50-150	150-300 100-200 50-100	50—100
6— <u>10</u>	2 <del>1</del> 6	3-8	7—10 2—4	V.70	5—6 3—4	ν.4	6 4—5	4-6	4-5	20.00
::	::	::	::	::	: :	<b>4</b> 8	Culto	2½—3 2½—3 1¾	24-3 12-12 14-12	::
2—3 2—3	3-34	3-34	::	3-31	::	₩.#I	3 4	34-4 24-33 2-24	60 CG 	3}
15-35 8-15	15-25 8-15	15-25 8-15	::	20—25 8—15	::	31 25	25-30 15-20	30—36 25—29 10—15	25-30 19 10-15	30
::	::	::	::	::	<i>:</i> :	::	::	:::	:::	::
33	91	4I 35	8 %	88	22.82	28 28	12	36 20 20	86.83	2 8
Large. Small.	Large. Small.	Large. Small.	Large. Small.	Large. Small.	Large, Small.	Large. Small.	Large. Small.	Large. Medium. Small.	Large. Medium. Small.	La ge. Small.
:		::	·				::		:	]
7   Mulki	Hosabettu	Bukkapatnam	Mangalore	Ullal	Manjeshwar	Kumbla	Kasaragod	Baikal	Hosdrug	Taikadapara
7	20	6	og O	11	12	13	14	15	91	17

## WEST COAST-MALABAR DISTRICT.

## NUMBER of boats engaged in fishing.

	Remarks.													
	Weight of fish that can be carried.		:		:	:	20 to 30	manuds.	Do,	Do.	Do.	Do,	Do,	Do.
	Sails.		Use oars	and thick cloth or mat sails.	Do.	దేద	ŠŠ		Š Š	} Do.	å	Ď,	, ~	) Do.
Description of boats.	Cost.	KS.	350~500	and thick cloth or mat sails.	50-100	350-500	200 200		200002	200—600	200-500	150-400	200 - 500	250-400
escriptio	Crew.	MEN.	9			۲.	20	_	<b>~</b> 10	3-4	3-7	,	3-7	× 4
I		. FEBT.	ເດ		~5°	m	72 -755 73 -755	-	33	თ <b>შ</b>	່ຕີຄ	33.	พห	13-12 J
	Length. Width. Depth.	FEET.	35		'n		24-32		3 - 3 - 3 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	4 6	- kg v	100 K	10 cs	34 24
	Length.	FEET.	30-35		2426	30-35	30-35		30-35	30-35	30-35	32	30-35	$\frac{3^2}{21-26}$
Number of boats.	Built- up boats.	[	:		:	:	: :		::	: :	:	: :	::	: :
Numb	Dug. Built- out up canoes. boats.		99		æ	30	26		120 20 20 20 20 20 20 20 20 20 20 20 20 2	88	49	<b>0</b> <sup>4</sup>	41	225
	or or small.		Large.		Small.	Large.	Large.		Large. Small.	Large. Small.	Large.	Large.	Large. Small.	Large. Sriall.
	ju .		_	_~-		) ::: (r	:	•	:	:	:	:	:	:
	Name of yard.			Madai, Pazhayan- gadi.		Matul (Azhikkal	Baliapatam		4 Cannanore	5 Tellicherry	6 Kurichi	Madakara	Badagara	9 Quilandi
ber.	Gerial num			7	_	19	n		4	'n	9	~	ဘ	6

Canoes are flat hottomed, have no sails but at times the crew use their cloths rigged upon oars as a sail.	
Bo.  Bo.  Bo.  S. to 15  maunds.  Do.  To to 20  maunds.  To to 20  maunds.  To to 15  maunds.	Do.
Do.   Do.   Do.     Do.     Do.     Do.     Do.   Do	and sail.  Do.  Do.  Do.
250 - 400 60 - 250 60 - 250 60 - 250 60 - 250 60 - 250 70 - 150 70 -	20-150 50-125 20-50 50-125 20-50 80-200 50-80 45-300 45-300
V.V.V.00 a.0 a 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ν   να 4 α νωνωνα ν ω       :) νω νωνα ν
वियोग्य है । । । वा वा त्यात्य ते । वियोग्य वा त्यात्य ते ।	1
1	### ### ### ##########################
33 26 27 37 37 37 37 37 37 37 37 37 37 37 37 37	25 25 36 36 36 37 30 30 30 30 30 30 30 30 30 30 30 30 30
	::::::::::
2 2 2 3 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5	84 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Large. Spall. Large. Small. Large. Small. Do. Large. Small.	Large. Small. Large. Small. Large. Small. Large. Small. Large. Small. Large. Small.
II Puthiappa  IZ Calicut, North  I3 Calicut, South  I4 Beypore, South  I5 Beypore, South  I6 Parappanangadi  I7 Tanur  I8 Paravanna  I9 Kuttal  20 Ponţani  21 Pudu Pondani	Veliangode Palappatti Mannalamkunuu Edakazhiyur Blangad Chavakkad
01 11 11 11 11 11 11 11 11 11 11 11 11 1	22 22 24 25 72 28 28 28 28

SECTIÓN II—cont.

# WEST COAST-MALABAR DISTRICT-cont.

Number of boats engaged in fishing-cont.

	Remarks.						-		
	Weignt of fish that can be carried.		10 to 20 maunds.	ő Ó	to to 15	20,000 mackerel	and sardi-	4,000 to 5000 mackerel	and sar-
	Sails.		Use oars	Ď.	Do.	Do.		Do.	
Description of boats.	Cost.	.88.	120-130	130	100-125	150-200		75—100	-
Description	Crew.	KEN.	ro «	າທທ	Ŋ	ıνı		ю	
	Dug- Built. Cengih. Width. Depth.	FEET.	124	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	2424	24-3		2-23 14-2	
	Width.	FEET.	ω <del>.</del> ξί	3. 3. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	3}	334 24-3		2-23	
	Length.	FEET.	35	35	33	30-35		20-25	
Number of boats,	Dug. Built- out up canoes boats.		::	: :	:	;		:	
Num	Dug- out		. 2.01	88	12	4		91	
,	or or small.		Large. Small.	Large. Small.	Large.	Do.		Small.	
	Name of yard.			: :	Bimbalu <sub>t</sub>		Cochin		
per.	Serial num		29	တ္တ	31		32		11

## SECTION III.

## VARIOUS kinds of nets, etc., in use.

WEST COAST—SOUTH CANARA DISTRICT.

	(z)	(2)		(3)		(4)		(5)		(9)	
Z Sign	Gangoli	Hangarkatta.	ig.	Tonse.		Malpe I.		Malpe II.		Udiavar.	븀
		Dimensions of nets.	Cost.	Dimen- sions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Rampani net	In use	1800 × 15 to 30	RS. 1750— 3,500	In use	RS :		RS. 2500— 4000	1800 V 15 to 20 B to 14	RS. 2500 4,000	1800 x 15 to 20	KS. 2500— 4,000
Vaibalai (called Nulu- hala, Maribalai, Paithubalai, etc.).	In use	36 X 20	270	До	: .	36×20 4 to 1	270	36 X 20 \$ to 1	270	In use	
Drift and wall 11sts. Kandabalai (Gill net)	In use	300 × 8	20	:	:	300 X 8	. 20	300 X 8	50	:	:
Çasting nets. Vichubalai	In use	25 diameter	91	•	:	25 diameter	91	25 diameter	91	16 In use	:
Hooks and lines. Cheria Bepu (Small),	In use (with 600 hooks). Fishing at a depth of 15 to	Same as in Gangoli.	1	Same as in Gangoli.		Same as in Gangoli.		Same as in Gangoli.	:	. :	
Shore lining	so feet. In use	In use	:	In use	:	;					

## SECTION III-cont.

# WEST COAST-SOUTH CANARA DISTRICT-cont.

Various kinds of n

								_														
نه:			va.	Cost.		RS.	:	001	110	150-	200		:		45 50	:	45	1	:	:	:	:
e net in inche		(12)	Manjesnwar.	Dimensions			: ,	Bag 27×26	10 10 10 10 10 10 10 10 10 10 10 10 10 1	300 X 18	ja ja		In use			:	81×60		:	:	:	:
sh of th				Cost.		RS.	:	200	250	:			:			:	90 80	_		90-100	:	-100
cont. Denominator denotes mesh of the net in inches.		(II)		Dimensions of nets.		;	 Wines	9×06	* to 2	:		25X9	24 to 4	:		:	:	:			: ;	3 to 3s mesh.  80-roo
<i>nıt.</i> enomin		Je.		Cost.		ES.		400		:		:		:			:	:	•			<u>.</u>
in use $-lpha$ ts in feet. $$ D	-  -  -	(10) Mangalore.		Dimensions of nets.		:		əsn ur		:		:		:	In use			In use	:			- :
s, etc., Ith of ne		nam,	-	Cost.	RS	:		:		:		:		:	<del></del>		 :	:		-:		- }
Various kinds of nets, etc., in use—cont. or denotes length and breadth of nets in feet. Deno.	[6]	Bukkapatnam.	Dimensions			:	Wings	4 to 4	;			:		: }	15×9	ot i	75X9	12	:	:	;	•
OUS ki		ita.	_	Cost.	ž.	:	 :		:			:		:	:	:		 :	:	:	_ :	
Vari Tumerator den Tin rupees,	(s)	Hosabettu.	Dintensions	of nets.		: 2	oo X oo	4 to 3				:			I to I	:	25X9	15 25	:	:	 :	
yard—N			Cost		RS.	4000	100	200	:		:	:		100		:	5-30		9,	011	:	
under each denotes pric	(2)	Mulki.	Dimensions	or nets.			8 X 8		:		:		:	X 6 to 9	-	o to 75 X o	24 15-30	:	to 75 X 9	470	:	
N.BColumn I under each yard-Numerator denotes length and brendth of nets in feet.		Nets.			Rampani net	Vaibalai (called Nulu-	Paithubalai, etc.).	Kollibalai		Dryf and wall nots.	Achabalai		alai	Do. (Kanthala- 45	Kanthuhalai	Aiburlahalai 60	:	:	Guddalabalai	Kallathabalai (Olaihalai)		•

:	ä	:	8	:	_	15 -20	:	::::	. : .
:	80 X 26	:	30×13	· :		20 long	ŧ	: : : :·	:
:	1215	:	:	14-24		12—16	11-6	25 - 26 8 - 10 12 - 14 11 - 13	101
:	i	:	:	In use		Do:	å" mesh	d d d d d d d d d d d d d d d d d d d	Small Refer 500 yards long. Big Befer 100 fathous long hooks to fathoms apart (o" hook).
:	:	;	:	:		:	:	<b>:</b> : : :	:
:	(48	;					:	1111	n se
In use	240×48	In use	i	;		•	In use	ខ្ញុំខ្ញុំខ្ញុំ	Bepu in use,
:	:	:	:	:		i	:	::::	•
25X9	80×36	75×9 6	;	-·- :		:	a, mesh	do.	Soo yards long; hooks of ft. apart, at depth, 7 to 14 fathoms.
:	•	:	:	:		. :	:	: : : :	9
- 5X5	80×36	25X9 6	:	:		;	36 to 39 ft. long.	do.	500 yards   long; hooks   6 ft. apur, at depths   7 to 24 fathoms.
;	15	:	:	:		;	15—20	12   18 15   20 15   20	9
:	80×30	:	Ĭ	:	_	:	In use 36 to 39 ft, long	4 to 4" mesh 4 to 4" mesh 3 to 4" mesh 3 to 4" mesh 3 to 4" mesh 3 to	Small Beyn  for yards long  with hooks at  with hooks at  Fishing at a  depth of ro  fathons and  below.
:	Aila-	yaru-	:	et).		:	:	: : : :	<u> </u>
· <b>;</b>	alled Malal	(Bally	:	hore n	sels.	:	÷	::::	d lines.
Pathurlai	Pattibalai (c chalavala in	Shorakubalai (Ballyaru- balai of Sravuvala).	Oduba'ai	Gorubalai (Shore net).	Casting nets.	Vichubalai	Debbala	Nanjinabalai Parlabalai Tikkalabalai Tikkandabalai	Hooks and lines. Bepu

\* Vavurijala is a Ratoagiri drift net in use at Mangalore, etc.

# WEST COAST-SOUTH CANARA DISTRICT-cont.

Various kinds of nets, etc., in use-cont.

N.B.—Column Column	n I under each yard— Numerator d n 2 denotes price of nets in rupees.	rd— Ni of nets	r under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches.	gth and br	eadth of ncts in fec	t. Der	cominator denotes	mesh of	f the nets in inche	ni
	(13)		(14)		(15)		(91)		(17)	-
Nets	Kumbla.		Kasaragod.		Baikal,		Hosdrug.		Taikadapara.	현
	Dimensions of nets.	Cost.	Dimensions of nets,	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Vaibalai (called Nulu- bala, Marihalai, Faithubalai, etc.	In use	. BS:	In use	RS. 100	In use 3, \$ 10 3	200 -	In use	RS.	In use	RS.
Kollibalai Drift and wall nets.	300X18	:	81 X 000£	100-150 In use	In use	:	300×18	:	300×18	73
Kaibalai		4-5	30×17	4-5	:	:	:	:	;	:
Kandadibalai	2 to 3	:	81X 800	4	In use	4-5	46×9	က	108×18	9
rubalai or Sravuvala).	:	:	40×10	5—8	ъо.	:	40X10	3-5	i	1
Muppiribalai	75×18	4	75×18	4	:	:	<b>o</b> -	:	ī	
Odubalai		4	50X 16	4	In use	4-6	130×15	5-7	i	:
Thirandibalai	5 to 6	345	60 X 18 5 to 6	325	Do	45	n :	:	:	:
Gorubalai (Shore net).	:	:	In use	:	Ωο	:	In use	:	:	:

								•	
,	ih H	÷	:	:	: -		:	:	:
	In use	:	:	:	:		340 yards long 9" hooks at 10 fathoms.	;-20 1,000 ft. long.	ļ
-	_:	:	:	:	:		:	15—20	:
	;	:	:	:	:		300-500 yards long.	Soc-roco yards long. Fishing depth 30 to 50 (fathoms.	In use
	:	:	:	:	7 - 10		:	:	:
-	:	:	22 ft. long	:	12 ft. long		:	;	In use
-	:	:	:	:	:		:	15-20	:
_		25 ft. long	22 ft. long	II ft. long	12 ft. long		:	800—1000 yards) long. Hooks at every 6 ft. Fishing depth x5 fo so fathous.	
	:	:	:	:	:		:	i	:
	:	25 ft. long	22 ft. long	rr ft. long	12 ft. long		:	i	:
Casting nets.	Vichubalai		Churukubalai	Muttukannibalai	Thirudsha'ai	Hooks and lines.	Valia Bepu (Big)	Cheria Bepu (small).	Shore lining

### WEST COAST-MALABAR DISTRICT. VARIOUS kinds of nets, etc., in use.

. N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches. Column 2 denotes price of nets in rupees.

	(1)		(2)		(3)		(4)		(5)	
Nete	Madai.		Matul.	-:	Baliapatam.	i	Cannanore.		Tellicheny.	}
	Dimensions of nets.	Cost.	Dimensions of nets.	S Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
		RS.		RS.		RS.		RS.		RS.
Pernyala or Paithu-	Bag 24 X 36 4 to 1  Next portion 69 X 36 6 X 7	18	In use	. 75— ISO	60 X 18	75-	81 X 09	75-	Pouch 150 broad at mouth and 60 to 75" long or deep.	50-175
Kollivala		50. 180.	Do	-001	60 X 24	75-	In use	75	In use	150-200
Drift and wall nots. Ailachalavala *	40 X 20	:	Do.	4	75 X 24	50~	20 pieces of - 75 X 24	50 80	zo pieccs— 60 X 30	24 each piece.
Mathichalavala	:	:	Do	40	:	:	20 pieces of— 75 X 24	30	20 pieces – 60 X 30	24 each piece.
Ayakuravala	8 sections - 40 X 20	:	ŀ	:	:	:	In use •••	;	pi	:

50 -7. to 25	- 200 - 25 - C	50-7c	50-75	sto 25 S0-75	n. 5 - 10	:	ooks 40—50 of 10 iron	yards
8 or 9 sections— 40 to 50 X 20 to 25	12 to 15 sections —	15 sections— 40 to 50 × 20 to 25 6	60-90 8 sections— 40 to 50 X 20 to 25		ro to 12 lon 6	In use	170 yards. Hooks at intervals of 10 fathous iron chain 14 ff. long.	800—1,000 yards with 2" hooks at every 5 ft.
:	::	50 100	o <b>6</b> o9	30—50		:	:	Rs. 10 per 500 yards.
Do	!!	120 X 36 6	75 X 30 8 3	108 X 90	In use	Do.	;	500—670 yards. Hooks 2" attached at 6 ft. intervals.
:	<b>:</b> :	70- 100	70-90	_ <b>:</b>	_ :	:	:	:
;	: :	120 X 36 6	75 X 30 8	:	In use	:	:	:
75	유 :	:	20	9	:	;	:	į
:	:		i	:	•		used 1911, then from	these
In use	Do. 	:	In use	Do.	In use	:	Not user before 1911 since then ancu from	to use these.
:		:	:	:	5-10	;	20-25 Not belon saince norm	40 – 50
su		40 X 20 5 to 6	40 X 20 64 to 7		n mesh			yards; 40-50
8 or 9	; : ′	8 sections— 40 X 20		:	In use 1‡ inch mesh 5-10 In use	:	Hooks 9" tong	1,000 – 1,300 hooks z".
:	::	:		:		Drag		ŀ
Kandadivala	Kolanvala Oduvala	Ozhukuvala	Sravuvaja	Thimndivala	Casting nets. Thirudavala	Koruvala (Shore Drag net.)	Books and lines. Valia Bepu†	Che <b>ria</b> Bepu

\* The use of Aliachalavala and Mathichalavala was for bidden by the local fishermen's ranchayats in Cannanote, Tellicherry and neighbouring villages and also at Tanur; last year this was relaxed in North Matar I ut is still in force at Tanur + Valia Begna 200-1000; and with 4"-9" hooks attached to iron chains suspended at intervals of 18 to 20 yards.

# WEST COAST-MALABAR DISTRICT-comit.

## Various kinds of nets, etc., in use-cont.

N. B. - Column I under each yard--Numerator depotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches.

	-	(9)		(7)		(8)		(6)		(10)		(11)	
N		Kurichi.		Madakara.	zi.	Badagara.		Quilandi.		Eattur.		Puthiappa.	
	A	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
l'eruvala Paithuvala	n In	95n	78. 50-1 100	In use	AS.	In use y" mesh	RS. 60 – 150	In use	RS. 60 – 120	Bag 34 long Croundnet 63 X 87	R5. 60 - 120	In use	RS. :
Kollivala	<u>-</u>	 Do:	150	Do.	:	In use	:	:	;	Walls 179	:		i
Drift and wall netr.		-											
Ailachalavala*		:	:	60 × 30	:	Do	8	50 X 30	33	50 X 30		50 X 30	:
Mathichalavala *.	<u></u>	:	:	In use	:	Do	:	60 X 18	25	81 X 09		81 X 09	:
Kandadivala In	I.	use	50-70	Do	:	ro to 12 pieces	6	55 X 18	25	55 × 18	:	55 X 18	i
						63 × 30 to 36				1			
Kolanvala		:	:	До	:	'.;	:	:	:	:		:	:
Natiyanvala.	<del>.</del>	;	:	:	:	4" mesh	દુ	30 X 17	4	30 X 17	;	30 X 17	:

:	:		:	:			:	:	:	:		25-30	15-23	
40 X 16	. :		24 × 14	76 × 17	,	In use	:	:	:	In use		160 – 500 yards; 25 – 30 hooks at every ro fathoms.	800-1,200 yards; hooks at every 5 ft.	
:	÷		:	:		;	:	:	•	:		:	•	
40 X 16	:		24 X X 24	76 × 17	,	In use	:	:	:	In use		240-340 yards; hooks at every IO fathoms.	1.000 1,300 yards; hooks at every 5 ft.	
25	:		8	30		:	:	:	5-15	:		25	20	
40 X 16	In use	•	24 × 18	70 X 17	•	:	:	:	10 to 15 to 25 long 5-15	In use		160 - 340 yards; hooks at every 10 fathoms.	1,000 – 1,300  yards; hooks at every 5 ft.	
50	6		;	30		:	:	:	ro to	:	_	:	:	
Io pieces, 3"	ro to 12 pieces	50 X 30 to 36		7" mesh		:	:	_	6 to 8 long	e, :		In use	Do.	
:	:		:	:		:		:	:	:		Hook in- clud- ing chain 3 to 4	Half to ranna per hook.	
:	72 X 24 5 to 6	,	50-75 In use	υ°.				:	In use	Do.		250 yards: Hook hooks 7" clud- to 4" ng chain growth a no 4" a	1,000 yards Hooke I" to 2" at every 6 ft.	
:	5070	1	50-75	50-75		1	: ,	21-12	:	:		:	:	
:	:		:	:			gno	1					r,000 with ks at	
In use	Do.		Ď.	Do.		: :	ro to 12 long	<b>*1</b>		:		•	800 1,000 yards with z" hooks at 6 ft. i uer-	
;	:		:	:		68	:	:	:	hore	1165.	:	:	
Oduvala	Ozhukuvala		Sravuvala	Thirandivala	Casting nets.	Ailakettumvala	This 3	Iningavala	Vichuvala	Koruvala (Shore Drag net)	Hooks and lines.	Valia Bepu†	Cheria Bepu	

• The use of Ailachalavala and Mathichalavala was forbidden by the local fishermen's panchayats in Cannanore, Tellicherry and neighbouring willages and also at Tanur; last year this was relaxed in North Malabar but is still in force at Tanur.

† Valia Repu 200-1,000 yards with 4' to 9" hooks attached to iron chains suspended at intervals of 18 to 20 yards.

# WEST COAST-MALABAR DISTRICT-cont.

Various kinds of nets, etc., in use-cont.

N. B.—Column I under each yard - Numerator denotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches.
Column 2 denotes price of nets in Rupees.

	(21)		(13)	1	(14)		(12)		(91)		(r <sub>7</sub> )		
Nets.	Calicut, North.	·th.	Calicut, South.	utb.	Beypore, North.	orth.	Beypore, South.	outh.	l'arappanangadi.	gadi.	Tanur.	1	
	Dimensions of nets.	8	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	
		, Si		RS.		, ss		RS.		RS.		RS.	
Peruvala or Paithuvala In	In use	150	In use	:	:	:	[n use	20° 10° 10° 10° 10° 10° 10° 10° 10° 10° 1	varies # - #	:	A to A	1001	
Kolli vala	:	:	:	:	•	:	:	;	80 X 35	:	80×35	:	
Drift and wall nets.						_							
Ailachalavala *	50 X 30	30	50 X 30	30	50 X 30	25—35	:	:	:	:		:	-7
Mathichalavala	60 × 18	25	60 X 18	25		25-36	;	:	:	:	:	;	
Kandadivala	55 X 18	:	25 X 18	25		2530		;	10 sections— 60 X 18	4 each piece.	8 to ro sections— 60Xr8	4 cach.	
Kaivala	:	:	 :	:	:	:	:	:	10 sections—	each		7-8	
Muppirivala		;		:	In use	6 each piece.	:	:	10 sections	4 each 8	8 to 10 sections — 75×18	9 1	
Nariyanvala	30 X 17	04	30 X 17	6	40 In use	6 each 8	S to 10 pieces	4 2	:	:	· ;	:	
Oduvala	40 X 16 24 to 3	:	40 X 16	:	•	:	; ·	:	ro sections – 50×16	3~ 4 each piecc.	8 to 10 sections	3 - 4	
			•	_		_	•	_	-		<b>C</b> **		

10 4 each.	1034-5	:	:	:	:	:	:	:		:	፥	:	:
zetions Ze X 1	8 to 10 sections— 60X18	5 – 6 20 ft. long	22 ft long	11 ft. long	· :	12 ft. long	:	:		In use	 Do.	Do. (with z to 6	:
4 each piece.	3½ - 5 each piece.	:	:	;	:	:	:	:		;	:	:	:
5-7 10 sections—4 each 8 26X16 piece. se	10 sections - $3^{\frac{1}{2}} - 5$ 60 × 18 each 5-6 piece	20 ft. long	22 ft. long	II ft. long	:	12 ft. long	:	:		:	:	:	
	;	10 – 12	20 - 23	3-4	15-20	3-4	1015	:			11-98	:	
8 to 10 pieces— 18X17	•	Io-15 30 feet long	20-24 long 12-24 20 feet long 20-23	II feet long	20 ft. long	io ft. long	In use .	:		to to 340 yards long; hooks at every to fathoms.	300 to 850 8½—II yards long: hooks at every 5 ft.	ŧ	
120 - 8	40-50	10-15	12-24	:	10-15	7-12	:	:		:	:	6 as.—	2-4
24×14	76X17 6	24 long.	20 - 24 long	· :	18-24 long 10-15	12-16 long 7-12	;	i			:	Hand lining 6 as in the river 14 as with 2 to 6	In use
120	i	:	:	:	;	:	;	:		10-15	20-25	:	:
24 X 14 S	70 X 17 6	•	:	:	:	:	:	In ase			До.	•	:
120	:	:	:	:	:	•	:	:	-	0 – 15 -	20-25	;	:
24 X X	76 X 17 6	In use	:	:	:	:	:	In use		160-340 yards 10-15 In use long; hooks at every 10	I,300 s long; satevery	ار :	:
:	i	:	:	:	:	:	:	Drag	S.	-: -	:	:	-
Sravuvala	Thirandivala	Casting nets. Ailakettumvala	Churukuvala	Muttukannivala	Pakkuvala	Thirudavala	Vichuvala	Koruvala (Shore Drag net).	Hooks and lines.	Valia Bepu†	Cheria Bepu	Hand lining	Harpooning

· The use of Ailachalavala and Mathichalavala was forbidden by the local fishermen's panchayats in Cannanore, Tellicherry and neighbouring villages and also at Tanur last year this was relaxed in North Malabar but is still in force at Tanur.

† I alia Repu 200 — 1,000 yards long with 6" to 12" hooks attached to Iron chains suspended at intervals of 9 to 10 yards.

# WEST COAST—MALABAR DISTRICT—cont.

Various kinds of nets, etc., in use—cont.

N.B —Column I	Column 1 under each yard—Numerator der Column 2 denotes price of nets in Rupees.	-Numer rets in I	ator denotes length Aupees.	and br	$N.\beta$ —Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Column 2 denotes price of nets in Rupees.		Denominator denotes mesh of the nets in inches.	nesh of	the nets in inches.	
	(31)		(61)		(20)		(21)		(22)	
Nets	Paravanna.		Kuttai.		Ponnani.		Pudu Ponnani.		Velliangode.	<b></b>
	Dimensions of nets,	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Peruvala or Paithuvala.	Varies	RS. 35 — 50	Varies	RS. 35 - 50	Varies	RS. 35-50	Varies to I	35—50	Varies	RS. 40 ~ 50
Drift and Wall nets.										
Ailachalavala	50×30	5 - 8	50X30	5 - S	50×35	5 - 8	50 × 35	5-8		5 1 8
Mathichalavala	45 to 50 X 10 to 15	ΛŲ.	5 40 to 50 X 10 to 15		90×174	-70	90 X 174	אי	40 to 50 X 12 to 15	5-8
Koravala	40 to 50 X 15 to 20 I to 1\$	-10	5 40 to 50 X 15 to 20		5 40 to 50 X 15 to 20	7.7	40 to 50 X IS to 20 I to It	رر ا ا	40 to 50X15 to 20 I to 1½	10
Kandadivala	50 X 20	4 – 6	ŧ	:	50 X 20	4 – 6	50 X 20	4-6	50 X 20	4-6
Muppirivala	60 X 18	5 - 8	60 X 18	5-8		5-8	60 X 20	5-8	60 X 18	5-8
Oduvala		. 5-8		5-8		.5   S	S)	5-8	50 X 16	81.8
Sravuvala	25XI5	5 - 8	25X15	5 - 8	25×15 6	5-8	25 X 15	5, 1, 8,	25 X IS	5-8
Thirandivala	5c×15	30	S,	5-8	5-8 50 to 60× 15 to 20	 	50 to 60 X 15 to 20	5-8	5-8 50 to 60 X 15 to 20	5-8

_	5-15		10-13	i	:
	5-15 10 to 25 long		85-200 yards. 10-13	125200 yards.	In use
	5-15		:	:	:
	Io to 25 long		85 yards long	500 - 1,000 yards.	:
	•			i	
	To to 25 long		80 ) ards long; hooks at 10 fa-	I,000 yards long; hooks at every	5 ft.
_	5-15		10-12	1215	i
	5-15 10 to 25 long 5-15 10 to 25 long		170 yards long; 10-12 80 yards long; 5 hooks at 10 fa-	thoms.  500 yards long; 1215 1,000 yards long; hooks at every	5 ft.
	5-15		:		:
	To to 25 long		:	In use	:
-	:		1	:	-
Costing nets.	Vichuvala	Hooks and lines.	Valia Bepu	Cheria Bepu	Hand lining

### SECTION III—cont.

# WEST COAST—MALABAR DISTRICT—cont.

## Various kinds of nets, etc., in use-cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches. Column 2 denotes price of nets in Rupees.

	(23)		(24)		(25)		(52)		(22)	
	Palappatti.	iti.	Mannalamkunnu.	.nat	Edakazhiyur.		Blangad.		Chavakkad.	
Nets.	Description Cost.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.
		ES.		RS.	1	RS		Š		RS.
Peravala or paithuvala	Varies	S,	Varies to F	35—50	35—50 Bag 20 to 30×15	35—50	35—50 Bag 20 to 30 X 15 to 20	:	:	:
Kollivaal	:	:	i.	:	In use	÷	In use	:	In use	ŧ
Drift and wall nets.										1
Ailachavalavala	50 X 30	5-8	50 X 30	5 - 8	5-8 15 to 25 X 10 to 12	:	IS to 25X10 to 12	:	75X24	÷
Mathichalavala	40X 12	4	40 X 12	4	15 to 25×10 to 12	:	15 to 25X 10 to 12	:	75X24	:
Koravala	:	:	i	:	i	i	:	:	60 X 30	÷
Kandadivala	50 X 20	4-6	50 X 20	4-6	4-6 In use	:	In use	:	180X24	:
Muppirivala	60 X 18	4 to 7	60 X 18	4-7	:	:	:	:	:	:

:	:	:		:	:
				:	:
:	δΧ3ο 6	90 X 30		÷	:
	<b>1</b>	<b>6</b> /1		In use	Do.
:	:	:		÷	:
				:	:
to 10X7 to 8	35X 12	Z   #		. :	:
S to Joy	35. 4	<b>§</b>		In use	Ď.
:		:		:	:
8 to 10X7 to 8	35X12 44	40×12		:	:
:	5-8	518		:	:
:	25×15 6	50X15 5	-:	:	,
. :	ر ا ه	30		:	·:
	51	15			:
:	25X15	50×15		In use	. <b>D</b> o.
:	:	:		:	•
	· <b>:</b>	:	t lines.	- :	:
Ozbukuvala	Sravuvaia	Thirandivala	Hooks and lines.	Valia Bepu	Cheria Bepu

### SECTION III—cont.

# WEST COAST—MALABAR DISTRICT—cont.

## Various kinds of nets, etc., in use-cont.

N.B.—Column I under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes mesh of the nets in inches. Column 2 denotes price of nets in Rupces.

	(28)		(6 <b>z</b> )		(30)		(31)		(32)	
Nets.	Vadanapalli.	n.	Kotimbikadappuram.	ouram.	Kurikuzhi.		Bimbalur.		Cochin.	
	Description of nets.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.	Description of nets.	Cost.
Peruvala or Paithuvala	40 X 20	.88. 60	In use	ns 60 – 70 In use	:	RS. 60-70	8s. 60-70 In use	sg.	In use	RS. 70~80
Kollivala	% × %	100	;	:	ī	:	:	:	:	:
Drift and wall ness. Allachalavala		18 - 25	48 X 18	3-4	48 X 18	3-6	In use	64	:	:
Mathichalavala	30 X 19	. 6	In use	:	In use		I use		45 X I3	3-5
Chinavala Kandadivala	: :		20 pieces	: **	20 pieces	: *	In use	::	In use *	::
Muppirivala Sravuvala		<u>.</u> i .	e : :	1 1 1	o ; ;	· ::	In use Do	::		 9—10each
Thirandivala	• : • :	አ .:	84 × 18	34	84 X 18	34	Do	÷	: ه	piece,
Casting nets. Koruvala (Shore Drag	:		In use	i	In use		Do	:		:
Hooks and lines.	: i	! !	::	::	::	: :	65 yards long	::	In use, since 1908, Do. do.	i i
		_								

### SECTION IV.

### METHODS OF CURING FISH.

### WEST COAST-SOUTH CANARA DISTRICT.

### GANGOLI.

Large fish such as seir, pomfrets, cat fish, small sharks, kora. palameen, etc., are split through the dorsal line from the root of the tail to the tip of the snout and the guts and gills are removed. In this position the vertebral column remains attached to one side of the The vertebral column is severed from the skull by a transverse cut at their junction and the knife is again placed below it at the point where it is cut and passed downwards till the root of the tail is reached, thus separating the vertebral column from the fleshy side of the fish for the greater part of its depth but still keeping it attached to the fish by means of the uncut portion of the skin on its dorsal side. This operation gives the fish a wide flat shape of enlarged appearance, an important matter since such fish are usually sold by number and not by weight. Scores are then made in the thick fleshy parts by passing the knife length-Some curers who want to defraud their customers cut off wedge-shaped fillets from the fleshy parts without disturbing the skin and it is not easily detected; when fish are sold by number this benefits the curers to the extent of the flesh thus removed. fish is washed and salt is applied to the scores and well rubbed all over the cut surface. They are then arranged in layers in salting receptacles such as half barrels, tubs, or small dug-outs, and kept usually for a night. Next day they are washed in the self-brine formed in the salting vessels and put out in the sun on coir mats or cadjans spread on the sand. It takes at least two full days to dry the fish. In the case of thinner fish such as ribbon fish, mackerel, small pomfrets, etc., only the first dorsal cut is made and the vertebral column remains attached to one side of the fish and no scores are needed. Mackerel are also slit on the abdomen and salted after removing the guts and gills. Sardines are cured either by cutting off the head and the abdomen with a single diagonal cut or by simply slitting and removing the guts and gills. Large sharks are cut into pieces of convenient size and filletted. Skates and rays are cut on both sides of the vertebral column which together with the head and tail is removed and remaining portions which are really the two elongated fins are cut into fillets. These remain attached to the skin at the apex of the fins and when separated are of a wedge-shape. Smaller fish of various kinds are gutted by pulling off the gullet or are simply roused with salt or put in brine and sun-dried. Some very small fish such as nethali small sardines, prawns, etc., are simply sun-dried without salt by spreading them on the beach. All cut up fish are washed usually

in the sea water before they are salted, but when they are taken out of salting tubs they are cleaned only in the self-brine and very rarely in sea water. A second washing in sea water will make the fish look neat and give it good colour but the washed fish would weigh less than the unwashed fish. Mackerel for Colombo are slit on the back, the guts are removed through an incision made in the abdomen and salt is stuffed in.

Salted fish are usually packed in mat bundles; occasionally such valuable fish as seir, palameen, etc., intended for the Colombo market are packed in second-hand dealwood cases.

Ordinary prop	ortion	of sal	!t			
Large fish		•••	•••	•••	•••	I:5
Mackerel	•••	•••	•••		• • • •	I:6
Sardines	•••		•••	•••	•••	I:7
Dryage						
Large fish	•••	•••	•••	•••		19 to 24 per cent.
Mackerel		•••	•••	•••	•••	31 to 37 ,,
Small fish	•••	•••				45 to 61 ,,

### HANGARKATTA.

Method of curir	ıg <i>—v</i>	ide "G	angoli	."				
Proportion of .	salt—							
Large fish	•••	•••	•••	•••		I:5		
Mackerel		•••	•••	•••	•••	I:6		
Sardines	•••	•••	•••	•••	•••	1:7		
Dryage								
Large fish	•••	•••	•••	•••	•••	19 to 24 p	er ce	nt.
Mackerel	•••	•••	•••	•••	•••	31 to 37	"	
Small fish	•••	•••	•••	•••	•••	45 to 61	**	

### TONSE.

### Method of curing-vide "Gangoli."

alt—					
	•••			•••	I:5
		•••	•••		I:6
	•••	•••	•••	•••	1:7
	•••			•••	48 per cent.
•••	•••	•••	•••	• • •	40

### MALPE I AND II.

### Method of curing (ordinary)-vide "Gangoli."

Colombo method of curing.—Mostly mackerel are cured in this manner. Fish are slit on the ventral side from gullet to the vent by passing a sharpened piece of bamboo shaped like the blade of a small pocket knife and the guts and gills are pulled out. The women and girls who do this are very quick with their fingers,

The fish are then washed in the sea and salt with a small piece of tamarind (korka) is thrust in the abdomen of the fish. They are then arranged in layers in a barrel with sprinkling of salt and tamarind between each layer and some weight placed on the top. The barrel is then closed temporarily and kept for 3 or 4 days at the end of which period the brine that is formed in the barrel is drawn off through a small hole made at its bottom. The fish is pressed down with the hands or by the weight of a man standing on them. The barrel is then filled with more fish from other barrels and this operation may be repeated till the barrel is filled to the very top. It is then headed up and the brine that was drawn out poured back into it through the bung hole till it is completely full and overflows. The bung hole is then closed and the barrel is ready for shipment. The proportion of salt required is 30 lb. per maund (82 lb.) of fish, and each barrel may contain on an average 6,000 fish weighing about half a ton. Mackerel cured in this fashion can be kept for many months, and some classes of people in Ceylon have a special liking for them and pay good prices; at times the retail price may even reach an anna per fish. This cure is conducted by people who specially come for the purpose during the mackerel fishing season, and though they have practised it in Cochin and a few other places in the south for many years past, it is only three or four years since they started this at Malpe; several thousands of barrels are now being shipped every year. The average cost of a barrel of fish is as follows:—

			RS.
6,000 mackerel at Rs. 5 per 1,00	0	•••	30
Salt, tamarind, and labour			5
Cost of an empty barrel			12
Freight, shipping charges, etc.	•••	•••	13
			60

The selling price as shown above may reach double this, so that there is a large margin of profits to the curing merchants, and it is no wonder that the number of these curers including some of the local men, has been increasing at Malpe every year. Big fish such as seir, pomfret, etc., cut up into slices, may also be treated in this manner.

Ratnagiri method of curing.—Generally large fish such as seir, black pomfrets, sharks, palāmeen, etc., are treated in this manner. The fish are split, gutted, and cleaned as in the ordinary method of curing. One pound of salt is required for 3 pounds of fish; half the quantity of salt is rubbed on the cut surface of the fish, and they are then stacked on the floor of the curing shed to a height of 3 or 4 feet. On the second day half the remaining salt is rubbed in and the fish so re-stacked that the top fish become the bottom ones; on the third day the remaining salt is applied and the fish re-stacked again. It is allowed to remain in this condition for another eight days when the fish are sufficiently dry and are then removed; they are not sun-dried afterwards. The foul brine flowing out from the stacks is absorbed by the sand on the floor of the shed. This method of curing is carried on by curers who resort to this yard

from Goa, Ratnagiri, Viziadrug, and other places in the Bombay Presidency, and who send away the cured fish for sale in those parts. Sardines and mackerel are also treated in the same manner but the fish are simply roused with salt. Enquiries made show that this class of fish also find their way into some of the markets in this Presidency such as Bangalore, Madras, Bellary, etc., under the name of Goa or Bombay fish,

under the name of Goa	or pou	ibay na	sn,			
Proportion of salt—						
Local method—						
Large fish Mackerel !				•••	I:5 to I:6	
Sardines	•••			•••	1:6 to 1:7	
Small fish	•••	•••	•••	•••	1:9	
Colombo method—	-30 lb.	per ma	und.			
Ratnagiri method-	<del></del>					
Large fish		•••	•••	•••	I:3 (in three stalmes	
Small "	•••	•••	•••	•••	I: 4 (in two edinstalmen	quál
Dryage						,
Large fish			•••	•••	19 to 24 per ce	ent.
Mackerel	•••	• • •	•••	•••	- , <b>- ,</b> ,,	
Small fish	•••	•••	***	•••	45 to 61 ,,	
	UD	IAVAR	•			
Local method of curi salt and dryage are simi	ilar to	those o	of Mal <sub>j</sub>	angoi pe <b>I.</b>	r Proportion	01
		ango	l. '			
Proportion of salt-	•					
Large fish Medium ,,	•••	•••	•••	•••	I:4	
Mackerel	•••	•••	•••	•••	I:5 I:6	
Small fish	•••	•••	•••	•••	1:8	
Dryage—						
Large fish					47 to 54 per c	ont
Mackerel	•••	•••	•••	•••	38 to 74 "	CHI.
Small fish	•••	•••	•••	•••		
•	ноя	SABETT	TU.			
Method of curing-	vide " (	angol	i."			
Proportion of salt—			7			
Large fish					T + 4 to 7 - #	
·	•••					
Medium ,, Small ,,	•••	•••	••••	•••	I:4 to I:-5 I:7	

### MANGALORE. Dryage— ... ... 47 to 55 per cent. Large fish ... ••• ... 38 to 74 ,, Small ... ... ... BUKKAPATNAM. Method of curing—vide "Gangoli." Proportion of salt-Large fish ... ... I:4 ... ... ... ... 1:6 ... ... ... 1:7 Mackerel ... Small fish ... ... 1:7 to 1:8 Dryage-Large fish ... ... ... ... 47 to 54 per cent. Small , ... Method of curing -vide "Gangoli." (The large Ratnagiri machwas (boats) which fish from here during the season, at times stay out at sea for a few days curing their catches on board with Bombay duty paid salt.) Proportion of salt-Large fish ... ... ... 1:5 to 1:6 ••• Mackerel ... ... ... ... Small fish ... ... ... ... I: 6 to I: 7 ... 1:8 to 1:10 Dryage-Large fish ... ... ... Small " ... ... ... ... ... 40 to 50 per cent. ... 50 to 60 " ULLAL. Local and Colombo methods -vide "Gangoli" and "Malpe I." Proportion of salt-Large fish ... ... ... ... 1:4 to 1:5 ... I:7 to I:8 Small " ... • • • ... • • • Dryage-Large fish ... ••• ... 40 to 50 per cent. Small " ... ... 45 to 55 " ... ••• ••• MANJESHWAR, KUMBLA, KASARAGOD. Method of curing-vide "Gangoli." Proportion of salt-Large fish ... ... ... ... ... I:4 to I:5 Small " ... ... ... ... I:7 to I:8 ... I:7 to I:8 Dryage— Large fish ... ... ... ... ... 47 to 55 per cent. Small " ... ... ... ... ... 38 to 74 "

### BAIKAL, HOSDURG.

	BA	KIKAL,	позы	UKG.					
Method of curi		de " Ga	ıngoli.'	,,					
Proportion of						•			
Large fish Small ,,			•••	•••		1:5			
Dryage-						•			
Large fish Small ,,				•••		30 to 50 per cent. 45 to 70 ,,			
		TAIKA	DAPAF	RA.					
Method of curi	ng <i>—vi</i>	de "G	angoli	."					
Proportion of	salt—								
Large fish			•••		•••	1:5			
Small "			•••			1:8			
<i>Dryage</i> —vari			•••	•••	•••	42 to 65 per cent.			
WEST	COA	s:rM	ALAB	AR DI	STR	ICT.			
		M	ADAI.						
Method of curi	n <i>g</i>	ide "G	angoli	,,					
Proportion of				•					
Large fish			•••	•••	•••				
Medium ,,	•••	• • •	•••	•••	•••	•			
Small "	•••	•••	•••	•••	•••	1:7 to 1:8			
Dryage—									
Large fish Small "	•••	•••	•••	•••	•••	32 to 48 per cent. 52 to 60 ,,			
MATUL, BALIAPATAM.									
Method of curi	ng—vi	de " Ga	angoli.	"					
Proportion of	salt—								
Large fish			•••	•••		I:4 to I:6			
Mackerel		•••				I:6 to I:7			
<ul> <li>Sardines</li> </ul>			•••	•••	•••				
Small fish	• • •	•••	• • •	•••	•••	1:7 to 1:8			
Dryage									
Large fish		•••	•••			40 to 50 per cent.			
Small "	•••	•••	•••	•••	•••	4-4-6-			
		CANI	NANOR	E.					
Method of curi	na			-					
Proportion of		iue G	angun.	•					
Large fish			•••	•••	٠.,	I:4 to I:6			
Mackerel	•••	•••		•••		I:6 to I:7			
Sardines a	.nd oth	ner sma	all kine	ds	•••	1:7 to 1:8			

Dryage—									
Large fish Small "			•••	•••	•••	53 to 60 t 45 to 55			
		TELLI	CHERI	RY.					
Method of curi	ng <i>—vi</i>	de "G	angoli	."					
Proportion of	salt—								
Large fish Mackerel Sardines	•••	•••	•••		•••	I:6 to I I:7 to I	: 7 : 8		
Sardines Small fish	•••	•••	•••	• • •	•••	I : 7 to I	:8		
Dryage—Large fish Small "				•••		40 to 50 50 to 60			
		KU	RICHI.						
Method of curi	ngv	ide" G	angoli	.,,					
Proportion of	salt—								
Large fish Mackerel Sardines Small fish	•••	•••	•••	•••		I : 7 to I	: 7 : 8		
Dryage—						-			
Large fish Small "		•••	•••	•••		30 to 45 35 to 65	per cent.		
MADAKARA.									
Method of curing—vide "Gangoli."  Proportion of salt—vide "Kurichi."									
Dryage—									
Large fish Small "			•••	•••		25 to 45 35 to 45			
BADAGARA.									
Method of curing—vide "Gangoli."									
Proportion of	salt-								
Large fish Mackerel Sardines Small fish Dryage—	•••				•••	I:4 to I I:6 to I I:7 to I I:7 to I	: 7 : 8		
Large fish Small "	•••		•••			25 to 45 25 to 65	per cent.		

### OUILANDY.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage—vide Badagara.

### ELATHUR.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage-

Large fish ... ... ... ... 25 to 45 per cent. Small ,, ... ... ... ... ... 25 to 50 ,,

### PUTHIAPPA.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage-

Large fish ... ... ... ... 30 to 45 per cent. Small , ... ... ... ... ... 25 to 55 ,,

### CALICUT, NORTH.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage-

Large fish ... ... ... ... ... 30 to 45 per cent. Small , ... ... ... ... ... ... ... 35 to 65 ,,

### CALICUT, SOUTH.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage—vide "Calicut North."

### BEYPORE, NORTH.

Method of curing—vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage-

Large fish ... ... ... ... 30 to 45 per cent. Small " ... ... ... ... ... 40 to 65 "

### BEYPORE, SOUTH.

Method of curing - vide "Gangoli."

Proportion of salt—vide "Cannanore."

Dryage—vide "Beypore, North."

### PARAPPANANGADI.

Method	of	curingvide	٠.	Gangoli."
3.20 til 0 ti	-			~~

Proportion of salt-vide "Cannanore."

ח	rvage-	_
$\boldsymbol{\nu}$	VULE-	

Large fish	 		•••	 30 to 50	per cent.
Mackerel	 •••	•••	•••	 35 to 45	"
Sardines	 •••		•••	 40 to 50	,,
Small fiel				10 to 65	

### TANUR.

Methods of curing—vide "Gangoli." But sometimes fish intended for particular localities in the Madura, Ramnad, Tanjore, etc., Districts are cured in a special way; e.g., cat fish are slit on the back, gutted, and packed with salt; the next day they are packed in cadjan bundles and forwarded without washing or drying. The salt not having thoroughly penetrated the tissues of the fish they become soft and have a putricl smell. This resembles the pit cured fish of the East Coast Yards.

Proportion of salt-vide "Cannanore."

Dryage-	_

Large fish			•••	•••	•••	25 to 40	per cent.
Small "	•••	•••	•••	•••	•••	45 to 65	,,
Mackerel	•••	•••	•••	•••	•••	50	,,

### PARAVANNA.

Method of curing—vide "Gangoli."

Proportion of salt-vide "Cannanore."

<b>T</b>	
Dryage—	
DI VILLE	

Large fish	•••	•••	•••	•••	•••	25 to 40	per cent.
Small "	•••		•••	•••		40 to 50	,,
Mackerel	•••	•••	•••	•••		35 to 40	,,
Sardines	• • •	•••	•••	• • •	•••	35 to 45	,,

### KUTTAI, PONNANI.

Method of curing-vide "Gangoli."

Proportion of salt-vide "Cannanore."

### Dryage-

Large fish	•••	•••	•••	•••		25 to 45	per cent.
Small "	•••	•••		•••	• • •	40 to 50	,,
Mackerel	•••	•••	•••	•••	•••	35 to 40	"
Sardines	• • •	•••		• • •	•••	35 to 45	,,

### PUDU PONNANI.

Method of curing-vide "Gangoli."

Proportion of salt-vide "Cannanore."

Drvage-

-, Jugo							
Large fish	•••	•••	•••	•••	•••	27 to 38 per	r cent.
	•••	• • •	•••		•••	50 to 55	,,
Mackerel	•••	•••	•••	•••	• • •	37 to 50	,,
Sardines	• • •	•••	•••	•••	• • •	45 to 55	,,

### VELLIANGODE.

		1	ELLIA	NGOD	E.			_		
Method of curing—vide "Gangoli."										
Proportion of										
Dryage— Large fis Small , Sardines		 			 		25 to 40 to 43 to	50	"	ent.
			рата:	PPATT	т					
Method of cu		_	e " Ga	ngoli.''						
Dryage— Large fis Small ,	sh .	 	•••	•••			26 to 35 to			ent.
		MA	NNAL	AMKU	NNU.					
Method of cu Proportion Dryage—vi	iring of so de "	g <i>—vid</i> ult—vi Palap	le "Ga ide "Ca patti.'	ngoli.' annand	ore."					
		E	DAKA	ZHIYU	R.					
Method of co		_		_						
<i>Dryage</i> — Large fi Small	sh . " ·	••					25 to 25 to			
			BLA	NGAD.						
Method of c	urin	g-vi	de " Ga	ngoli.	,,					
Proportion		_		_						
<i>Dryage</i> — Large fi Small						•••	25 to 40 to	35 60	per (	cent.
			CHAV	AKKA	D.					
Method of concentration of Colombo method Proportion Cannana Proportion of Cannana Canna Cannana Cannana Cannana Cannana Canna Cannana Cannana Cannana	of ore."	salt	for (	ordina:	ry me	thoc	of		ng-	-vide
Large fi Small						···	3:8	} :6		
Dryage (or	dina	ary)—					-			
Large fi Small	sh "	•••				•••	25 to 40 to			cent.

### VADANAPALLI.

Method of curing—vide "Gangoli."
Proportion of salt-vid? "Cannanore."
Dryage-vide "Chavakkad."

### KOTIMBIKADAPPURAM, KURIKUZHI, BIMBALORE.

Method of curing-vide "Gangoli."
Proportion of salt-vide "Gangoli."

Dryage—					
Large fish		•••	 		26 to 35 per cent.
Small "	•••	•••	 •••	• • •	40 to 60 "

### COCHIN.

			•	O O 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Method of Colombo n Proportion "Cannar	netho of nore.	d of o	curing for	g <i>—vide</i> ordinar	"Malp y me	e I." thod	of		ng <i>—vide</i>
Proportion	of s	alt for	r Colo	mbo me	ethod (	of cur	ing-		
Large	fish		•••	•••	•••	• • •	3:	8	
Small	,,	• • •	• • •	•••		•••	5:	ΙĢ	
<i>Dryage</i> — Large	fish	•••	•••	•••	•••	•••	25 1	to 35	per cent.
Small	11	•••	• • •	•••	***	•••	40	10 00	>>

STATEMENT showing the chief kinds of fish brought to the yards, West Coast.

Wost Oddst.								
Malayalam names.		Canarese or Tulu names.		Scientific or popular names.	Times at which largely caught.	Locality.		
Sravu.		Tudtte or ballias	r.					
Makarasravu	•••	Etti-balliar		) Rhinobatus.		)		
Kallansravu		Karuvaiballiar	I	j		j		
Mandisravu		Kajithatte	•••	j	Aug. to Apl	l l		
Karimandistavu		Karmandithatte	!		Oct. to Dec	l		
Netuvasravn		Niddathatte				i		
Kannankodi		Kabbethatte		Hammer-		1		
Pullianstavu	,	Pilthatte		headed				
Vattitholan				shark.	Nov. to Feb	i		
Kakkasravu		Kapputhatte		Sharks	Do			
Koithala				ranarks	Do	11		
Mookansravu		Neikaplathatte		Carcharias		i		
Manakottan		Hoigethatte		melanop.		Ц		
Poosravu		Hoothatte		terons.		l i		
Kurinchisravu	••	Kurlathatte			Dec. to Feb	11		
Udumbansravu	•••	Puliballiar				} }		
Chorastavn		Kemputhatte		1		[		
Velasravu	•••	Naithatte		1	Dec, to Feb	l i		
Vallisravu	•••	Chakkuthatte	•••	J Pristis Cuspi- datus.				
Therandi.		Thorake.				1		
Kottivalantherand	đi.	Kottarthorake	j	1				
Metherandi	•••	Meithorake	1	í		1.5		
Patentherandi	•••	Baladathorake		Mylioba-		Gangoli to Cochin		
Kakkatherandi		Kapputhorake	,	tides.		0		
Pulliantherandi	•••	Pilthorake	!	! <b>1</b>		1 3		
Panantherandi	•••			Skales and	Sept. to Feb.	1 17		
Chentherandi	•••	Canadhan lon		} Rays.	(Most of them	∐ ĕo		
Karintherandi	•••	17 dathamb.	•••	1	appear from Nov. to Mar.	l a		
ivaliminolo <sub>li(11</sub>	•••	Timational	•••		Some are caught occasionally with other kinds			
Neitherandi		Neithorake			of fish.) Oct. to Dec	11		
Mookantherandi	•••	Moguthorake			Do			
Chundantherandi	•••	Pulladathorake	•••	J		l i		
Etta.		Thede.						
Valia-etta		Mallathede		)	Aug. to Nov	[]		
Navetta	•••	Jelaithede	•••		Sept. to Oct	П		
Thannetta		Pingathede	•••		Do	1 <b>i</b>		
Konkalietta		Kappathede			Dec. to Mar			
Shoorietta		Kemmathede			Do			
Kurunthaletta		Makarathede		Arius (Sp.).	Dec. to Jan	l i		
Karietta	•••	Kargithede	•••	Cat fish.	Aug. to Oct.	l i		
		Mungalithede			and Mar. Do.			
Uruvanetta	•••							
Uruvanetta Velletta		Bilithade		0	Nov. to Feb	П		
	(	Bilithade Kendathede			Nov. to Feb Aug to Dec			

### Statement showing the chief kinds of fish brought to the yards, West Coast—cont.

Malayalam names.		Canarese or Tulu names.  Thede - cont.		Scientific or popular names.	Times at which largely caught.	Locality.	
Kora Chemballi			Bálde Kolanji	•	Sciæna (Sp.) Percidæ	Sept. to Nov	(
Ayakura	•••		Ayakoorai	•••	Seir (Cybium	)	ļ
Bareen			Anjal	•••	commersoni). (Cybium guttatum).	Nov. to Feb.	
Vameen	•••		Vámeenu	•••	Polynemus (Sp.).	Feb. to Mar	
Mezhumee Palameen		•••	Medumeenn Haligemeenu	•••	Cocoanut fish (Chorinemus lysan).	Do Nov. to Feb	
Vala	•••	••	Karli	••	Chirocentrus dorab.	Dec. to Jan	}
Karthavol	i	•••	Kappumanji	•••	Black pomfret (Stromateus niger).	Nov. to Mar	
Vellavoli	•••		Bili manji	•••	Silver pomfret (Stromatens sinensis).	Nov. to Jan	
Poomeen	•••	•••	Hoomeenu	•••	Chanos Sal- moneus.		Ì
Kolen or			Koleji	•••			١,
Murumeei Thalayan		•••	Murumeenu Pambol	•••	Serranus (Sp.). Ribbon fish (Trichiurus	Dec. to Jan Aug. to Sept.	Gangoli to Cochin
Neimeen	•	•••	Neimeenu	•••	(Sp.)). Pseudoscarus aeruginosus.	Nov. to Jan	5
Nallamati	ni	•••	Buthai	•••	Oil sardines (Clupea longiceps).	July to Mar	Gango
Chalamat	hi	•••	Yerabai	•••	Clupea fimbriatta.	Jan. to May	
Tholianm		•••	Swadi	•••	Clupea lile	Jan. to Mar	i
Kolakkay: Aila	an 	•••	Memathi Bangude		Mackerel (Scomber	Dec. to Feb Nov. to Mar	
					microlepido- tus).		j
Kandam	mullan		Gantu kurichi	•••	) '		1
Nalla mul Thali mul Chippa m	llan	•••	Chateukurichi Kanaikurichi Theppadekurich	 hi	Equula (Sp.).	July to Nov	
Nedu ma		•••	Neela manangu		5		
Cheruma: Neimar	ıangu).		Theppa manan	gu	Engraulis (Sp.).	June to Oct	
Mulluman Valan ma		•••	Nara manangu Thowa manang	u	(30.).		
Olamanth Naila-mai			Guddal nangu Theppa nangu		Sole fish Pseudorhombus	]	
Valanmar	ıthal		Bala nangu		(Sp. ). Cynoglossus (Sp. ).	Aug. to Nov.	

### Statement showing the chief kinds of fish brought to the yards, West Coast—cont.

Malayalam names.		Canarese or Tulu		Scientific or popular names.	Times at which largely caught.	Locality,
Etta-cont.		Thede-cont				
Vellachemmeen Cherattachemme Chittachemmee Mundachemmee Karin chemn Thinda	een. n en	Boli etti Thamel etti Bering etti Gudda etti Kajetti etti Ogirmeenu		White prawn.    Prawn   Penaeus (Sp.).   Sphyraena	June to Aug  Apl. and May.	
Adavu	•••	Adavu		(Sp.). (Lactarius	Aug. to Oct	
Chamban		Thiriyanda		delicatulus). Caranx crumen- ophthalmus,	Oct. to Dec	
Korakutti Koyala		Kalloori Kande	•••	Lutianus (Sp.). Hemirhampus	Aug. to Oct Feh. to Apl	
Nongal		Kane		(Sp.). Sillago (whit- ing).	Do	
Veloori Para Malan Thiruda Ambatta		Balanjil Parei Madthale Para		Clupea (Sp.) Caranx Spp Young mullet (Mugil), Mullet Opisthopterus	Aug. to Oct Do Sept. to Nov June to Sept June to Oct	Gangoli to Cochin
Keeran Kaduva Irimeen Aaral		Kaduvai Harlu		tartoor,  Eel (Plagusia	July to Sept, July to Oct, July to Sept	B.
Kanimeen Kethal Olaneen		Kallade meenu		Vilineata). Bonito	May to July	
Yeri	•••	Yeri		Lobotes surin- amensis.		!
Aranameen Parattimeen Parameen	•••			Saurida tumbil.		
Pattimeen Koli	•••	Goji	•••	Labijrithei- anabas.	Dec. to Mar	

### SECTION V:

### ECONOMIC CONDITION OF FISHER-FOLK AND CURERS.

### WEST COAST-SOUTH CANARA DISTRICT.

### GANGOLI.

Fishermen are Maraklas who are generally poor. They carry on the industry with their own small capital. In times of need they take loans at exorbitant rates, but there is no regular financing. Some times advances are made by dry fish merchants on condition that the fish cured is sold to them only and none else. Curers belong to various castes such as Roman Catholics, Muhammadans, Billavas, Konkani Brahmans, Sonegars (Goldsmiths), Serigars, Shettis, etc., and out of 36 ticket-holders only three belong to the fishing community. They are generally of moderate means except a few Mussalmans who are well-to-do. Each curer has I to 5 permanent servants for the season at Rs. 4 to Rs. 9. These gut, clean, salt and dry their fish. For mackerel females to whom money is advanced, attend to the gutting and all operations up to drying and are paid at 2 annas 9 pies per I,000 mackerel. Curing of large fish is done by male coolies.

### HANGARKATTA.

Fishermen and curers are generally poor but among the latter some are well-to-do Muhammadans, Billavas, and Christians who make advances to fishermen during the monsoon on condition of the sale of fish to them, when the season begins, at a rate below that of the market. All fishermen receive advances on these conditions so that competition is put down. Besides the local fishermen about 1,000 Goanese Christians are got down on the advance system by local curers for fishing from November to February; they come in groups and bring their own boats, usually two machwas (fairly large sailing boats) and nets; the advance is worked off by the catches. Besides these curers there are no other capitalists or middlemen. Hired labour is generally employed for (a) transporting, (b) gutting, (c) washing, (d) salting, (e) drying, and (f) storing, etc., and paid for according to piece rates. Curers sometimes make advances to coolies. Men are also engaged for guarding the fish at the yard and outside. The curers of the fisher castes get their work done by their women.

### TONSE.

Fishermen and curers are not wealthy but mostly poor. They are not financed by capitalists. Occasionally they obtain loans at high rates of interest. Coolies are not employed on monthly wages. Their wages depend upon the nature of the work, 3 to 4 annas per diem being ordinary wages.

### MALPE I.

Fishing is carried on by Mogers, one of the Hindu castes of hereditary fisher-folk. This is one of their biggest centres and there are several thousands of them living here and in the neighbourhood. Though most of them are illiterate, they have a strong caste Panchavat with a hereditary headman for the whole district who is also the spiritual preceptor. "His duties are to frame rules in regard to caste matters, to see if the people conform to them or not, and to impose penalties on those who infringe them." men catch fish and their women dispose of them either in the raw condition by taking them to the neighbouring villages or when the catches were large, they used to cure them with salt-earth. When the collection of salt-earth was prohibited they were obliged to cure fish at the fish-curing yards, but their caste Panchayat objected to their women-folk resorting to fish-curing yards for the reason that there were all sorts of men working there and they did not think it safe to allow their women to work alongside of a mixed crowd of people. This prohibition is still in force, with the result that fisherwomen though they gut and clean fish outside the yard, never enter it, and are therefore deprived of the wages which they could otherwise earn by the salting and drying operations which are carried on inside the yard. In April 1915 there were 71 ticket-holders of whom only six belonged to the fisher community, and these had also to engage coolies of other castes to carry on curing operations. The remaining ticket-holders belonged to various non-fisher castes such as Brahmans, Muhammadans, Christians, Bhunts, Shettis, Billavas, etc., who were attracted to this industry by the large profit it gives as several people have grown rich by it; these conduct operations through hired labourers who are paid mostly at piece rates. Thus the curing industry is mostly in the hands of non-fisher castes and the vast majority of Mogers have to depend for their maintenance on the earnings of their male members alone who do the catching. more well-to-do curers and fish merchants advance money to the fishermen who are obliged to give all their catches to them; they have also invested money in Rampani and Maribala boats and nets which are worked by fishermen on the share system; half of the sale-proceeds of their catches goes to the owner of the boats and nets and the other half to the men. They also control other boats so that the fishermen cannot sell their catches to any other party. Besides the local fishermen the merchants also get down Rampani fishermen from Goa, and Machwa fishermen with drift nets from Ratnagiri and other places in the Bombay Presidency. remain here and catch fish for three or four months during the fishing season. The Rampani net was introduced about 20 years ago and the first time it was operated the local fishermen raised objections which resulted in a riot. But gradually they themselves took to it and at the present time they have almost given up the old kinds of nets which their forefathers used. The Rampani net is made up of two to three hundred pieces, each costing Rs. 8 to Rs. 10, which are laced together at the time of the operation, and requires 50 to 60 men to work it. The fishermen therefore work it on a co-operative basis, i.e., each man brings three or four pieces and also contributes his bodily labour. Similarly the Maribala or Vaibala which is the same as the Paithuvala of Malabar, is of recent

introduction into those parts. A few of the well-to-do fishermen and a number of the merchants own these nets and boats which they have brought from Malabar. The Vaibala fishing is carried on only during two or three months following the monsoon when they expect large shoals of cat fish and kora, but as the local fishermen are not experts in the use of this net a large number of fishermen are also brought from Malabar for this purpose. These powerful and effective methods of fishing enable the fishermen to catch enormous quantities of fish and there are recorded catches of sardines worth more than a thousand rupees at a single haul of the Rampani. Though they get comparatively high prices for their fish the general condition of the actual fisher-folk cannot be said to have improved in the same ratio as that of other communities who have been connected with the industry. It is due chiefly to their ignorance and illiteracy as well as to intemperate habits, and being a thriftless people they spend money without the least regard to its value and are always indebted to others. A large number of Moger men from this district emigrate to Bombay where they are employed as peons, watchmen, and attenders under the big mercantile firms, banks and shops, and after a few years' stay return to their homes with decent sums of money in their pockets. These are very much improved in their ideas and manners and are better off than their stay-at-home brethren. Recently there has been an awakening and some of their men are attempting to introduce habits of temperance and other reforms in the community. During the last four years some Colombo curers have been resorting to this yard for the purpose of pickling fish, especially mackerel, in a particular manner for consumption in Ceylon. These people pay a higher price for the fish, and their presence has introduced an element of competition with the local curers who have hitherto been getting fish very cheap from the indebted fishermen who were under their control.

There are a few Mogers in this neighbourhood who own landed property and carry on cultivation in addition to fishing.

### MALPE II.

This is a private yard belonging to a rich and influential Moger man who has been taking a keen interest in the new methods of curing fish which have been introduced by the Fisheries Department and with that view had one of his nephews trained at the Government Fisheries Experimental Station in Malabar. He gets fish from nets for which he has advanced money and also from his own nets. Hired labour is generally employed in addition to four or five permanent servants at Rs. 3 to Rs. 5 per mensem with ration for eight months (September to April). Coolies are paid at job rates.

### UDIAVAR.

The ticket-holders belong mostly to non-fishing castes. Out of 2I ticket-holders in April 1915 only two were fishermen by caste. Fishermen who are Mogers are poor but the curers are well-to-do. They carry on business on a small scale and are not financed to any appreciable extent. The usual loan system during the off-season at 12 to 18 per cent interest is common. Other conditions are similar to those at Malpe.

### MULKI.

The fishermen are Mogers and use the nets and boats similar to those at Malpe. When the sea-fishing is slack they are engaged in river fisheries which give them enough to maintain themselves. Some of them own landed property and carry on cultivation. Curers are well-to-do. They conduct operations with their own funds; one is a member of a Joint Stock Company by which it is financed. Hired labour is employed by all curers on daily wages of 4 annas for a male, 3 annas for a woman and 2 annas for a boy or girl. In heavy seasons coolies are paid by the piece. A few Moger curers get their work done by their kinswomen. Average income of a ticket-holder is Rs. 200 per annum.

### HOSABETTU.

The majority of curers are well-to-do and in good circumstances. Some are capitalists who support the others. The fishermen are Mogers and are poor. Hired labour is engaged, not on monthly system but on job rates.

### BUKKAPATNAM.

Most of the curers are poor except one Moger and three Mappillas who finance by advances on condition (in a registered agreement) of the sale of all fish to them. Mappilla curers employ hired labour on daily wages (3 to 4 annas for males and 2 to 2½ annas for females), but Mogers do the curing work with their relatives.

### MANGALORE.

Curers belong to various castes, i.e., Muhammadans, Billavas, Christians, and Mogers. All fish curers except the poor Mogers are well-to-do merchants. Moger curers are petty local traders and are financed by Mappila and Billava merchants on condition that the cured fish is sold to them only. In such cases no interest is claimed. Some Moger ticket-holders (no other ticket-holders) go for There are some Moger women ticket-holders who deal in fresh fish and bring the surplus of unsold fish to the yard to be cured. All fish caught in Maribala, Pattibala or Thattu vala are brought to the yard as well as those caught by the Bepu (long line), of which a small portion only is sold fresh. Hired labour is employed for curing but Mogers themselves cure. Male coolies get Rs. 7 to 12 per mensem and females 2 to 4 annas a day. Special Ullal Mappilas who are experts, come for gutting cat fish, kora, etc. Coolies at times are paid by the job. Here also the curing industry is mostly in the hands of non-fisher castes who have been attracted by the large profits obtained. The fishermen are Mogers who carry on fishing mostly with casting nets. They go out for drift nct fishing in the season. In recent years the Maribala (Paithuvala) has been introduced from Malabar but, unlike in Malabar, these men use it only for a couple of months immediately following the monsoon when shoals of cat fish and kora approach the coast. As these nets and boats are expensive, advances are

taken from fish merchants by the fishermen who agree to hand over all the catches to them at a price fixed at the time of taking the advances; these rates are always very favourable to the merchants being below the market rates. The fishermen of this locality though they live within the limits of a big Municipality and come in contact with other people, are still in a backward condition as regards education of their children, matters of sanitation, temperance, thrift, etc. There is much intemperance both among men and women and though they get good prices for the fish which is sold as fresh by the women in the local market and neighbouring villages and for which there is always a good demand, the community does not appear to be prosperous. During the last few years there has been an awakening among some of the young men who have organised a society for improving the condition of their caste people by stopping drink, encouraging education This society has already done good work as it has been the means of inducing more than one thousand men to take the temperance pledge, and their example is having a beneficial influence on their community living in other parts of the district and branches of the society have been formed in a few villages.

Though Mangalore is a large port there are very few Mogers

who are engaged in the landing and shipping business.

### ULLAL.

Fishermen and curers are generally poor. There are no capitalists or middle-men among them and the business is carried on by loans which are discharged by payment in kind of cured fish. Permanent coolies at Rs. 3 to 6 per mensem are kept and also daily coolies of Moger women at I to 2½ annas. Expert Mappillas are engaged for gutting large fish on days of heavy catches and they are paid at job rates.

### MANIESHWAR.

Fishermen are very poor and take advances from well-to-do curers on condition that the catches are sold to them. Some curers have got partners and these themselves work without hiring any coolies except at times of heavy operations. Permanent coolies on monthly wages of Rs. 3 to 7 and temporary coolies on daily wages of 4 to 5 annas are engaged. Coolies work for job rates also. On days of heavy catches more than 500 persons work in this yard. A Co-operative Society was started here through the efforts of a merchant from Mangalore but it has not worked satisfactorily.

### KUMBLA.

Most of the fishermen are *Pudu Islams* and others are Mogers, but all are poor. Mappilla curers of moderate means advance money to some of the fishermen (Pudu Islams) on condition that the catches are sold to them. Moger fishermen cure their catches themselves. Hired labour is employed by Mappilla curers at job rates.

The condition of the Pudu Islams is much worse than that of the Mogers and they are always in debt. The reason for this is that in the case of the Mogers both men and women work whereas the Pudu Islam women do not go into the villages for selling fish and they depend entirely on the earnings of their men. The fish when sold in the interior villages fetch double what they would get if sold on the beach, so that the Moger women, by simply carrying the fish a moderate distance earn a modest income in support of the family.

### KASARAGOD.

Mukkuva fishermen are mostly poor and are gradually being supplanted by Mappillas with better boats and capital. All curers are Mappilla fish merchants who advance money to fishermen in return for catches. The Mukkuvas of this place are completely under the control of Mappillas and are not able to improve their condition. Hired labour is employed and paid by jobs.

### BAIKAL.

All curers (except one Mappilla) are Mukkuvas who are also fishermen owning boats and nets. Some well-to-do Mukkuvas advance money to poor fishermen and curers on condition that their fish is sold to them at lower rates than usual. A few fishermen take advances from Mappilla fish merchants who simply trade in dry fish. Generally the fishermen here are better off than those in Kasaragod and are independent of the Mappillas, so much so that this is the only yard where the curing industry is still in the hands of the fisherfolk. Their condition is much better than that of their fellow caste people in other places on the coast. Their men catch the fish which is dealt with by their own women-folk who sell it either as fresh or as cured. Thus the women being enabled to contribute their labour are not only able to keep the middlemen out but get the highest price possible and the combined earnings of men and women go to support the family. At one time there was a strong caste Panchayet among these people but in recent years it has lost its power. They are beginning to understand the value of education and those who can afford it send their children to school. A few of them have also invested money in other industrial concerns.

Hired labour is very seldom employed in this yard as the curers do their work themselves especially through their females. Coolies on days of heavy catches are engaged at 3 to 4 annas per day, and the system of payment by piece-work is also current. Coolies are generally Mukkuva females. Some well-to-do curers who carry on curing on a large scale engage permanent female coolies on monthly wages of Rs. 3 to 6. These permanent coolies attend to curing work only on days when operations are in hand and the remaining days they are free to attend to their own work.

### HOSDRUG.

Fishermen are Hindus called Moonnillakkars and are mostly poor and depend entirely on the fishing industry. They take advances of money from merchants in return for sale of their catches and in such cases no interest is charged. The fishermen own boats and nets and some of them have already become ticketholders in the yard and more of them are anxious to get tickets but owing to the want of space in the yard they have not yet been These are therefore obliged to sell their catches to the existing ticket-holders at cheap rates and are deprived of the profits which they could get if they themselves cured their fish. Most of them do not require any advance but the curers induce them to take it in order to have control over them. In one of the hamlets served by this yard there is an influential man who has secured a right or privilege to himself whereby all the fish landed in the hamlet must be sold through him. The fishermen cannot sell it direct to any body nor will any one come forward to make purchase directly from the fishermen. He fixes the price and pays it to the fishermen after deducting his commission which is said to be about 10 per cent and besides this the purchaser of the fish has to pay a commission of 2 annas per rupee on the price originally This being the centre of the tobacco cultivating area, large quantities of sardines are landed here for manuring the fields and all these have to pass through his hands enabling him to make a couple of hundreds of rupees in a single day during the busy season. Not only the local fishermen but even those who come here with fish from other parts have to submit to this. The fishermen are in no way dependent on him though he assists them with loans at times which they could as easily secure from other people in the place; they cannot explain why they submit to his control. This right was not exercised in the time of this man's father or grandfather but was created by himself and the fishermen obey it apparently for the reason that he is an influential man. Curers are mostly Mappillas some of them belonging to Mahé, Kasaragod, etc., and a few are Moonnillakkars. Permanent coolies on Rs. 7 to 8 per mensem are employed by Mappilla curers. The Moonnillakkar curers get their work done by their own females, and in addition they employ temporary coolies on days of heavy catches at piece rates. A few of the Moonnillakkars of this place are well-to-do and own landed property.

### TAIKADAPARA.

As at Hosdrug fishing is carried on by Moonnillakkars who are the owners of boats and nets and mostly of independent means. Several of them are ticket-holders in the yard and cure their own fish with the help of their women. There are also Mappilla ticket-holders but they could get their fish only from fishermen who are not ticket-holders. As the fishermen are somewhat well-to-do and independent the Mappilla ticket-holders who want to monopolise the yard are not on good terms with them. The fishermen have progressive ideas and are trying to better their condition. One of them is worth about Rs. 10,000 and they help each other for their common good.

Hired labour is employed by Mappilla curers and 4 annas is the

average daily wage of a labourer.

### WEST COAST-MALABAR DISTRICT.

### MADAI.

Fishermen are richer than curers owing to the fresh fish trade; some only own boats and nets, others take unemployed boats and nets on payment of half the value of catches to the owners of boats and gear. Curers are mostly poor and own no boats or nets but advance money to local fishermen and to fishermen from Banacote (Bombay Presidency) for catching large fish from November to February. Mukkuvas and others from adjacent parts, e.g., Dharmadam, Tellicherry, and Cannanore, come during the heavy sardine season and sell their catches to local curers. Fishermen and curers are Mappillas.

Coolies, mostly Pulayas, are engaged on daily wages of 1½ to 2 annas with rations. No separate payments are made for gutting or salting, but on days of heavy catches coolies for transporting the fish from beach to yard are engaged. Wages have recently increased owing to the establishment of fish oil and guano

factories.

### MATUL.

Fishermen and curers are generally poor; but curers, all Mappillas, are a little better off than fishermen and are financed by capitalists or middlemen. Hired coolies, mostly Pulayas, are employed for gutting and salting small kinds of fish and paid 3 annas per day. The curers themselves attend to the curing of large fish. They also carry fish from beach to yard. Owing to the establishment of fish oil and guano factories wages have increased recently.

### BALIAPATAM.

All curers (Mukkuvas) are comparatively poor, making only a hand-to-mouth existence; they do not work under capitalists or middlemen. No hired labour is employed. Pulaya coolies are available but from caste prejudice are not employed, and no others are obtainable; hence heavy catches are taken to Cannanore and Matul for curing. Such labour as is required is paid by the piece.

### CANNANORE.

Most fishermen and curers are poor. During heavy catches curers salt fish for Mappilla merchants with advances for buying salt and they are paid for their labour. Except a few individuals who are wealthy and influential traders all Mukkuvas are poor and live from hand-to-mouth. About 4 Mappillas and 24 Mukkuva curers are boat and net owners and the remainder are financed by middlemen on condition of the sale of the cured fish to them. Some curer women when they are hard up for cash to pay for salt, take loans which they return to the lender after the sale of the cured fish with interest at 2 annas per rupee. This, of course, is exorbitant, as the curing period is but 3 or 4 days. The Mukkuva curers who are mostly women, themselves do the gutting, cleaning and transporting of their fish, but Mappilla curers employ Pulaya coolies who are paid according to piece rates. The fishing is carried on by

Mukkuvas, Kollakkars, Pattanees, and Mappillas. Mukkuvas are Hindus, Kollakkars are Catholic converts whose ancestors were fishermen. Pattanees are a Tamil colony of Catholics who originally belonged to the Tinnevelly coast but settled down here many years ago, and the Mappillas are the ordinary Muhammadans of the coast and not Pudu Islams (or new converts). All these belong to fishing communities with the exception of Mappillas who have taken to fishing only recently though they have been engaged in buying and selling as well as transporting fish for many decades past. Boats and nets are usually owned by members of the fishing community, mostly as joint family property, and are worked by the male members of the family and any additional hands whose services are secured by means of a permanent advance made to them by the owners of boats and nets. The amounts thus advanced to a single individual may reach Rs. 200 and though they carry no interest the person receiving an advance cannot engage himself to any other party till he has paid back the amount, and in case of death his male heirs are held liable to repay the amount or to render their personal services. Half the sale proceeds of the catches on each day goes to the owner of the boats and nets, and the other half is divided among the crew, including the owner himself if he also went out fishing; the Taleiyáli (headman) or boatswain gets 1½ shares, youths half to three-quarter shares, and each grown-up man one full share. In addition to this the owner of the boat and nets gives out of his half share, to each of the crew a small sum as a present, to encourage and make them more careful about the boats and nets which they have to mend and repair without wages. of the crew as well as the owner is also entitled to take sufficient fish for his domestic consumption before the catches are sold. When the catches are small and fetch only a few rupees, the sale proceeds are divided among the crew and the owner takes nothing.

A couple of boats with a full complement of various kinds of nets and the advances made to the crew, cost Rs. 1,500 to Rs. 3,000. An owner after investing so much may, owing to failure of a season, have to borrow money from capitalists and others. For every Rs. 200 thus borrowed, they give to the lender a sum equal to the earnings of one of the crew and such earnings may vary from 2 annas to Rs. 25 per day. In other words Rs. 200 produces every day as much as an able-bodied man earns by his toil. Though no interest is charged, Rs. 200 doubles itself in a couple of years if the season is fairly good. Fish merchants also pay advancés to the owners of boats and nets, in which case they are entitled to buy the catches landed by those boats nominally at the market rate but practically at less than that. A very large number of boats are thus under the control of some of the merchants who buy the fish and get them cured by the Mukkuva women curers at the fish-curing yard. When large catches of cat-fish, mackerel, and other fish suitable for the Colombo market are cured, the merchants finally settle accounts with the fishermen only after such fish is disposed of in Colombo and should there be any loss they will cut down the price of the fish from that originally fixed. The sale of such fish takes several weeks and the fishermen who are hard up and have been in the meantime receiving only small sums in advance, are only too thankful to receive what the merchant is pleased to pay them in settlement of their accounts. The women curers who buy and cure fish

and sell them to merchants are also treated at times in the same manner.

There is a powerful Panchayet among the fisherfolk which settles all disputes arising among the community and relating to the fishing industry, but it is absolutely necessary that, as anywhere else, its constitution, jurisdiction and methods of enforcing decisions should be carefully safeguarded. A duly representative and well instructed Panchayet may be most useful in developing and safeguarding an industry and the welfare of its community, but such conditions are essential, as well as some degree of control from without.

### TELLICHERRY.

Except a few, all curers are very poor entirely depending upon Mappilla merchants who finance them in return for the sale of the whole lot of their fish at a low price. Labourer-fishermen take advances of from Rs. 50 to Rs. 100 from the owners of boats and nets to work in their boats. No interest is charged on such advances but before repaying it he cannot go and work in another man's boat. No special wages for gutting or salting are fixed. Curing work is done by Mukkuva women curers themselves or in the case of Mappilla curers by hired labour. The fishermen are Hindus, Christians or Mappillas. An ordinary pair of fishing boats with a complete set of gear together with advances given to labourer-fishermen will cost Rs. 2,000 to Rs. 4,000. After investing so much money the owner of boats and nets may, owing to failure of fishing season or other causes be obliged to borrow a few hundreds from the fish merchants or other capitalists. In such cases all the fish caught by the borrower must be placed at the disposal of the lender, i.e., the latter has liberty to buy it for himself or sell it to others. The price in such cases is much less than that realised by other fishermen who have not borrowed money and who are free to sell their catches to anybody they like. Most of the boats of this place are thus controlled by a few capitalists.

The Mukkuvas of Tellicherry were at one time-some forty years ago-the richest and most advanced among the fisher community on the Malabar Coast. They lived in well-built tiled houses. several of them being double-storied, owned landed and other immoveable property worth many thousands of rupees, and also carried on trade in dry fish with Colombo and other places on the East Coast. Most of the males were literates and could read and write their vernacular, and a fair number of their young men also attended the English schools. At that time not only the fishing and curing industry, but also the landing and shipping business of the port were in their hands, for conducting which they had large cargo boats of their own each costing a couple of thousand rupees. But for several years past the shipping and landing business has gone out of their hands, and with the exception of two or three individuals none of this community is at present engaged in it except as lascars and coolies working in the cargo boats owned by Mappilla merchants. As for fishing and curing these were allied industries; the men caught the fish and their women either sold them as fresh or cured and kept them till they had a good demand. Curing of all the smaller kind of fish including mackerel and even medium sized cat-fish was done with salt-earth which they gathered free of cost and stored, and the larger kind of fish were cured with the bazaar salt. The old men and women of the community even now assert that fish cured with salt-earth, provided that they were well cleaned in sea water after being taken out of the salting tubs, was in no way inferior to that cured with the Tuticorin salt and had decidedly a better flavour. When the collection of salt-earth was prohibited owing to the introduction of the salt tax and fish-curing yards were opened for enabling fish to be cured with duty-free salt, these people were reluctant to do so owing to their timidity and the fear that any slight infringement of the rules would result in their being sent to jail. Moreover in Tellicherry there was no proper site near the beach to locate a fish-curing yard affording accommodation for more than a hundred curers. It was at this time that the Mappillas, who were till then merely petty traders who purchased the cured fish from fisherwomen and sent it to the interior and distant markets for sale, stepped in and became ticket-holders in the fish-curing yard. With cheap salt at the disposal of the Mappillas the fisher women could not compete with them, and all the fish caught by the fishermen went to them at a very low price. After some years the fisherwomen also became ticket-holders but it was too late as the Mappillas had by that time practically monopolised the curing industry. These women were therefore obliged to serve as labourers under Mappilla curers and merchants. Hence a community who had lived in comfort on the income derived from the conjoint labour of their men and women, lost the major portion of the benefit derived from their industry, and being obliged to depend on the earnings of their male members alone, gradually lost their prosperity and are at the present time largely indebted to Mappillas who control their boats and thereby keep down the price of fish they catch. has been said that the fisherfolk should be better off now because the price of fish has gone high and they get double the price their forefathers got. But not only fish but all other commodities have increased in price, and though the fisherman gets better prices for his fish he has also to pay much higher prices for everything he buys; rice and other provisions and the necessaries of life, cotton and hemp required for his nets, the wages of carpenters and other labourers whom he employs, bamboos, timber, coir, thatching and other materials which he requires, have all gone up heavily. over the spirit of the times which has affected all other communities. from the highest Brahman to the humblest Panchama has not left him alone and as other communities are going in for a higher standard of living he is also doing it. Hence it cannot be said that the fisherfolk have been deriving any peculiar benefit by the mere fact of increase in the price of fresh fish. Moreover many fishermen are not ticket-holders and being without the means of curing their catches with the labour of their women-folk as was done in the days of their grandmothers, they are obliged to sell their fish to the Mappilla and other ticket-holders at a very cheap rate. especially the case as regards the more commercially valuable fish such as cat-fish, kora, mackerel, etc., which at times come in large shoals and which if cured and sold would fetch good prices. the fish-curing industry has brought in large fortunes to some people other than the fisherfolk is also a significant fact. In almost every fishing centre there are men of non-fisher castes who, beginning life as labourers or petty dealers, with hardly any capital

have amassed considerable wealth in the short space of ten or fifteen years. It shows that the industry is a profitable one but the people who are now benefited most by it are not the fisherfolk, and so long as this disadvantage continues the fishermen themselves cannot develop their industry.

This community used to have a strong and well organised caste Panchayet at Tellicherry but with the departure of the prosperity of the people this has also become weak and its voice is

seldom heard and rarely respected.

### KURICHI.

There are Mukkuva and Mappilla curers; the former except two or three, are all miserably poor and the majority depend upon Mappilla curers for their maintenance; in short Mukkuva curers are merely coolies of Mappilla curers and merchants who deal in salted fish. Mappilla curers engage coolies on daily wages of four annas. Operations are conducted on a large scale at times and there is no difficulty in getting labourers when required during heavy season.

### MADAKARA.

Both fishermen and curers are poor and not financed by capitalists; money required is raised by ordinary loan on interest and endeavours are always made to be out of the money-lenders' clutches. Labourer-fishermen are paid by shares in catches, curing coolies are paid by jobs, and no permanent monthly paid labour is engaged; Mukkuva curers attend to all their work without coolies; in a fair season the fishermen earn about 6 to 8 annas a day.

### BADAGARA.

Two Mappilla curers are wealthy and about four Mukkuvas are somewhat well-to-do. All the remaining Mukkuva curers are deeply indebted to one or other Mappilla curers and have mortgaged their boats and nets; no interest is charged but lenders have a prior claim over mortgaged boats and their catches. Only Mappilla curers engage hired labour at 5 to 10 annas a man and 2 to 4 annas a boy; no job rate is fixed; no men on permanent monthly wages are engaged. This yard was situated at some distance away from the fishing village and for a long time the fisherfolk were not able to resort to it and carry on curing operations as their women could not walk several miles a day. Thus the curing industry was for many years practically in the hands of Mappilla ticket-holders who carried on the business with hired labour, and since they got the fresh fish very cheap as the fishermen had no one else to buy their catches, they derived enormous profits. Later on when the yard was removed to the fishing village the fisherfolk also resorted to it for curing their catches.

### QUILANDY.

Fishermen, except a few Mappillas, are Mukkuvas. The latter are fairly intelligent in their calling but very backward in education and cleanliness. Most of the fishermen and curers are poor. They depend on fishing for their livelihood and when fish is scarce their

condition is miserable. Mukkuva men go out for fishing and women do the curing. As a rule fishermen are indebted to Mappilla merchant curers who advance money on condition of getting fish at 10 to 20 per cent less than the prevailing rates; no interest is charged but a standing loan is kept up as a hold on fishermen. Labourer fishermen are remunerated by shares in the day's catches. Mappilla curers engage coolies on daily wages of 2 to 4 annas; Mukkuva curers rarely employ coolies and job rates also prevail. Between Quilandy and Badagara over a distance of more than 14 miles, there are no fish-curing yards though there are several big fishing hamlets.

### ELATHUR, PUTHIAPPA.

Fishermen and curers are generally poor; in slack season their condition is very miserable. Money is borrowed from Mappilla fish merchants with no interest but on condition of selling fish at 10 to 20 per cent less than the prevailing rate. Standing debt is maintained which is cleared only when the curers resort to other lenders; by this system the curers and fishermen do not get the full value of the fish. Labourer fishermen employed for fishing are given a share of the catches and the coolies for curing are paid at 3 to 5 annas for men, 2 to 3 annas per woman and 2 annas for a boy.

### CALICUT, NORTH.

The actual fishermen are mostly Mukkuyas and Pudu Islams and a few Kollakars. Most of them have taken advances varying from Rs. 200 to Rs. 500 from Mappilla curers and merchants on condition of supplying all the fish caught by them to their creditors at the current market rate, less 10 per cent. No interest is charged on those advances which are treated as standing loans, but in addition to this they also take small loans occasionally in times of stress, etc.; these latter are deducted by the capitalists out of the price of fish supplied day by day. The fishermen may also raise loans from other money-lenders who are not interested in the fishing industry, on the security of their dwelling-houses or compounds, etc., at the rate of interest ranging from 12 to 24 per cent per annum but it is very rarely that they can raise a loan on personal security. The condition of fishermen is worse than that of their brethren in Cannanore and other places in the north of the district. They manage and regulate their industry more or less on the same lines as in Cannanore but the local Panchayet is a very weak body which has hardly any control over the members. Most of the curers are Mappilla capitalists who carry on their operations with hired labour. The women curers are few in number and do the work themselves.

As Calicut is a city with nearly 80,000 people there is a good demand for fresh fish and, moreover, a quantity of fish is packed in ice and sent to the Nilgiris, Bangalore, and other places. Hence the price of fish is much dearer than other places on the coast. Sometimes fresh fish is brought from Tanur, Quilandy, etc., to Calicut for local consumption. Being also a seaport a large number of fisherfolk are engaged in the landing and shipping business for several months in the year. Nevertheless the condition of this people during the monsoon months is miserable.

### CALICUT, SOUTH.

The curers are a poor set with no business enterprise or knowledge. They are not assisted by capitalists or middlemen. The Mukkuvas are poor; they do not own boats or nets but are employed under Mappila capitalists. Other conditions are similar to those of Calicut, North. Hired labour is not employed on permanent monthly wages but during heavy seasons coolies are engaged and paid at job rates.

### BEYPORE, NORTH.

Curers and fishermen are poor with no business enterprise or knowledge. They are not assisted by capitalists or middlemen. Operations in the yard are on a comparatively limited scale as the major portion of the fresh fish landed here is transported into the interior parts by small river boats. Moreover there are no big boats and nets here and the fishermen use mostly the casting nets. No hired labour is employed. The curers themselves do gutting, cleaning and salting.

### BEYPORE, SOUTH.

Economic condition is same as Beypore, North. There is a large number of long line boats here.

### PARAPPANANGADI.

Fishermen and curers, who are Pudu Islams, are poor. They depend entirely on fishing and if the fishing season is unfavourable their condition becomes miserable. They borrow from moneylenders at high rate of interest. They are not financed by capitalists or middlemen. Curers have no control over fishermen. Hired labour is usual for fishing and curing. Labourer-fishermen are paid by shares in catches. Coolies are employed for curing on daily wages of 3 to 6 annas for a man and half that rate for a boy. For gutting and transporting coolies are paid by the job.

### TANUR.

Fishermen, who are mostly Pudu Islams and Mukkuvas, are generally poor and some are pecuniarily helped by Mappila curers. There are no middlemen but curers deal direct with fishermen and buy fish at the market rate of the day. Curers purchase fish mostly for cash, and the account is settled once a week or rarely on credit with repayment after sale of the cured fish. Some curers lend boats owned by them to fishermen and share the catches. The fishermen are not bound and can sell their catches to anybody they like. Curers are mostly Mappillas and there are only a few Mukkuva and Pudu Islam curers who are poor. Though this is the largest fishing centre and though large quantities of fish are landed, the condition of the fisherfolk is as usual miserable. During the monsoon months, when they cannot go out fishing and earn something for their livelihood, they purchase from the Mappilla merchants rice and other provisions on credit at 50

per cent or more over and above the market rates. They execute a document giving their boats and dwelling houses as security and agree to liquidate the debt within six months; they must pay the amount and interest thereon in a lump sum and no instalment will be received. If the amount is not paid in time they are liable to an enhanced rate of interest as penalty. The fishermen can never get together the amount in a lump sum so that the original amount multiplies itself very quickly and repayment becomes more and more difficult till at last they are dragged into court and their property is sold. Thus an independent fisherman is reduced to the condition of a mere labourer. A co-operative society has recently been organised by the Assistant Director for the benefit of fishermen. There is no hired labour system on monthly wages, but permanent coolies on daily wages of 2 to 5 annas are employed for curing; temporary coolies are engaged during heavy seasons, and job rates are given for gutting and transporting.

### PARAVANNA.

Fishermen (Pudu Islams; no Mukkuvas) are poor, with no capitalists among them. They borrow money from the Mappillas on condition of selling fish at reduced rates.

Pudu Islam curers do not employ hired labourers; but Mappilla curers engage coolies and pay by job rates during heavy seasons, in addition to permanent men on Rs. 8 to 12 for male and Rs. 3 to 6 for boys.

### KUTTAI.

Fishermen (Pudu Islams) are poor with no capitalists. Some are financed by Mappilla capitalists for sale of fish at 25 per cent less than the prevailing rate. All Mappilla curers generally employ hired labourers. Pudu Islam females gut fish outside the yard and come to the yard for salting at heavy seasons when they are paid by jobs. No rates are fixed for big fish and there are rates for transport.

### PONNANI.

Fishermen are Pudu Islams. They are notorious for their ignorance, dirty habits, and filthy houses; but they are of strong physique and are hard-working. They are poor with no capitalists among them. They are indebted to Mappilla curers who advance money in return for fish at 10 to 20 per cent below current prices. Only a small number of them own boats and nets. Hired boats are paid either by shares in catches or Rs. 2 to Rs. 4 rent per mensem. Labourers employed in fishing are seldom paid money but only shares in catches. The fishermen of this and neighbouring localities are experts in long line fishing and go out with their long lines south as far as Cochin and north as far as Cannanore. Except a few curers, all largely employ hired labour, paying them at job rates. There are some permanent coolies at Rs. 2 to Rs. 5 per mensem. To compensate for the smallness of their wages they are allowed to cut out small fleshy portions of big fish before being cured. (See curing methods page 26). They are also given presents at Ramzan every year, of cloths worth Rs. 3 to Rs. 6.

### PUDU PONNANI.

Fishermen are Pudu Islams and their economic condition is very poor with no capitalists among them. All are indebted to Mappilla fish traders. The chief occupation is fishing but few own cocoanut topes. Most of the curers own boats and nets but the few without boats or nets work conjointly with those who possess boats and they get a share in the catches. For boats the owners are paid either Rs. 2 to Rs. 4 per mensem or a share in the catches.

The females of the ticket-holders attend to curing. Hired labour is employed on heavy days and is paid by the job. The ordinary cooly per day is paid 3 to 4 annas for males and 2 to 2½ annas for females.

### VELLIANGODE.

Fishermen are Pudu Islams. They are notorious for their ignorance, dirty habits, and filthy houses. They are of strong physique and are hard working. Their chief occupation is fishing and allied industries. A small minority are of moderate means and the rest poor—living a hand-to-mouth life. Mappilla curers engage men for their business and poor curers are in miserable condition. for they are compelled by three or four rich ones who advance money, to give all cured fish and fresh fish at very low prices.

No hired labour is employed generally but during days of heavy catches coolies at job rates are engaged. About 8 Mappilla curers keep permanent coolies at Rs. 2-8-0 to Rs. 4 per mensem with the customary perquisite of small fleshy parts of large fish and a present of cloths worth Rs. 3 to 5 on Ramzan day.

### PALAPPATTI.

Most of the curers are poor and entirely depend on this industry. They borrow money at 24 to 36 per cent interest from local capitalists. Labour is cheap and plentiful and wages are paid by jobs. A male cooly can get 3 annas and a female 2 annas per day.

### MANNALAMKUNNU.

Most of the curers are poor. There are five well-to-do curers. The other curers borrow money at  $2\frac{1}{2}$  to 5 per cent interest per mensem. Hired labour is generally employed on job rates. Monthly rates are paid in rare cases at Rs. 5 per mensem.

### EDAKAZHIYUR.

Fishing population consists of both Moonnillakkars and Pudu Islams. They are as a class unintelligent, uneducated, and ignorant. Only about 5 per cent of Moonnillakka males and 2 per cent of Pudu Islam males are literate and female education is uncared for.

The majority of the fishermen are poor, and are indebted from Rs. 100 to Rs. 300 to well-to-do ticket-holders to whom they are obliged to sell their fish. Only a limited number have proper houses and compounds, and most of the folk live in huts made of kadjan tatties. Only four Moonnillakkurs and one Pudu Islam possess

landed property, houses, boats, and nets. There is only one Moonnillakka ticket-holder and the rest are all Pudu Islams who wish to monopolise the curing industry and are against the introduction of Moonnillakka curers into the yard but the solitary Moonnillakka curer being somewhat rich and influential is able to resist them. These Pudu Islam ticket-holders call themselves merchants and look down upon the other Pudu Islams who are still carrying on fishing. Here also, owing to combination among the curers and to absence of other buyers the fishermen do not get proper prices for their catches.

Neither fishermen nor curers are financed by capitalists or middlemen but there is a system of advancing money to fishermen by curers under which big fish can only be sold to the creditor and this practice obliges the fishermen to sell such catches at reduced rates; there is, however, no restriction as regards the sale of small fish. No permanent coolies are engaged and temporary coolies are

paid by the job.

### BLANGAD.

Fishermen and curers (Moonnillakkars and Pudu Islams) are very poor, and live from hand-to-mouth. They have no capital to introduce better systems of curing. Mappilla merchant curers advance money and the fish should be sold to them. Other conditions are similar to those at Edakazhiyur. The temporary coolies who are engaged on curing big fish are paid four to six annas per diem.

### CHAVAKKAD.

Fishermen are very poor and lead a hand-to-mouth life. They get advances from curers on condition that catches of big fish are sold to curers. The curers are generally fish merchants dealing either direct or through brokers who come there to purchase fish. Hired labour is generally employed at job rates.

### VADANAPALLI.

Fishermen and curers are very poor, but a few own boats, nets, cocoanut topes, lands and houses worth between Rs. 1,000 and Rs. 2.000. Men engaged for fishing under advances are paid wages at the rate of 10 pies per rupee worth of catches; and those not under advances at double the rates. Curers (Mukkuvas and Pudu Islams) are law-abiding and quiet. Besides fishing and fish curing, cocoanut growing is carried on by some of the well-to-do curers who never go out for fishing but attend to curing only, leaving the fishing work to servants and relations. There are no capitalists among fishermen curers, hence they are unable to introduce better system of fishing. Most of these are dependent on Mappilla merchant curers who advance money to them without any interest. Fish is also brought from the fishing hamlets at a little distance but when such a consignment of fish comes the curers of the yard jointly fix a price and take the fish; the fish is then auctioned among themselves and is purchased by the one who offers the highest bid which is much higher than what was paid to the fishermen. The profit on the sale is divided equally among the curers. Hence the fishermen who bring their catches here are at the mercy of the curers and part with their day's labour for what the curers are pleased to give them. Coolies are available and are employed at job rates.

### KOTIMBIKADAPPURAM.

Most of the fishermen and curers are Arayans (one of the Hindu fisher castes) and are comparatively poor except three curers who are somewhat well-to-do. The remaining curers are assisted by the owner of the site of the yard whose tenants they are. Labour is cheap and plentiful and wages are paid by jobs. There are no permanent coolies employed.

### KURIKUZHI.

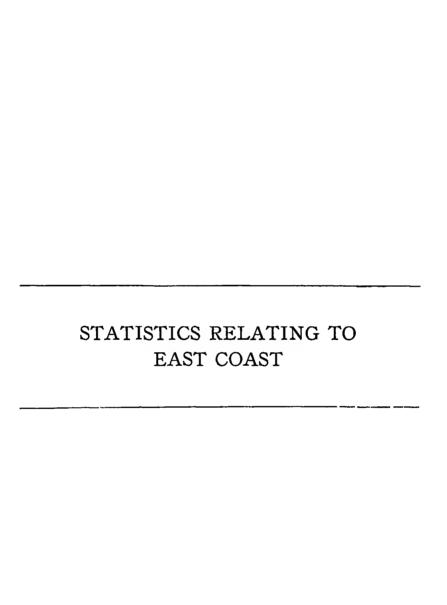
Fishermen and curers are comparatively poor. They depend mainly on the fishing industry alone. Curers are financed by middlemen who charge an interest of 8 annas per Rs. 10 per mensem (i.e., 60 per cent). There are no Mukkuva curers in this yard. Labour is cheap and plentiful and is paid by the job; no permanent coolies are employed. There are no Hindu ticket-holders in this yard and the curing industry is practically in the hands of Mappillas.

### BIMBALUR.

Fishermen and curers are comparatively poor except one curer. The poor are financed by local capitalists to whom they pay 24 to 36 per cent interest on money advanced. Labour is very cheap and plentiful. Coolies are paid by the job; there are no permanent coolies on monthly payments.

### COCHIN.

Fishermen are very poor, and they depend on curers and other capitalists for help. Curers are middlemen dealing in fish on a petty scale. There is a large foreign exporter who also commands a good local trade. He purchases fish very cheap at seasons of heavy catches and gives them to the curers for curing. Curers engage fisherfolk for curing and pay at job rates. Labour is very dear and daily earnings vary between 5 and 8 annas. Being situated near the big towns of Cochin and Ernakulam, and other thickly populated places, there is a great demand for fresh fish and curing is conducted only when fish is very cheap.



SECTION I.

EAST COAST.

FISH-CURING yards, number of ticket-holders, markets, etc.

					Numb	er of tic	cket holders—a	Number of ticket holders-average during quinquennium.	verage	during	Average	
Serial numbe	Name of yard	ard.		Markets to which salted, etc., fish is supplied.	-68-2831	•46-0681	1895-99.	**************************************	·60-\$061	.£1-0161	fish cured during the five years, 1909-10 to	Remarks,
Ξ	(2)			(3)	<b>æ</b>	(3)	9	3	8	6	(10)	(11)
	Kasipur	:	:	Market both within the district and adjoining Orissa up to a distance of about 60 miles	:	9	22	45	48	33	MDS. 903	Fresh fish is sent to Calcutta market,
	Prayagi	:	:	Market both within the district and adjoining Orissa up to a distance up to 85	14	52	82	88	8	2	1,155	
	Ganjām Gopalpur Markandi	:::	:::	Inics, Do. do. Do. Gopælpur and Berhampur, 10 miles Inland as far as Russellkonda, 60 miles and Cuttack.	4 8 9	11 10	22 13 14	85 % 80 15.80	3345	322	763 1,310 2,277	
<del>"</del> -	Sonnapur	:	:	Markets within the district at a distance of 65 miles.	:	:	:	:	39	72	1,097	Generally there is a
~ ~ ~	Pattisonnapur Peddakarrivanipalem	palem	: :	Local district markets within a distance of 80 miles. Local district markets within a distance of 50 miles.	- 0	)pened	Opened in 1907.	&.	53	23	1,251	uesh nsh from Ber- hampur and other places.

SECTION I-cont.

#### EAST COAST—cont.

Fish-curing yards, number of ticket-holders, markets, etc.—cont.

Name of yard.   Markets to	Markets to which salted, etc., fish is supplied.  Local markets in Ganjām and Vizagapatam districts as far as 100 miles from the yard and Paranipur.  Local markets within 15 miles and agency markets within 25 miles and 35 miles miles miles miles markets within 25 miles and 35 miles markets within 25 miles and 35 miles miles markets within 25 miles and 35 miles miles markets within 25 miles miles miles markets within 25 miles markets within 25 miles miles markets within 25 miles miles miles markets within 25 miles miles miles markets within 25 miles miles markets within 25 miles miles miles markets within 25 miles miles miles markets within 25 miles m	0.000-04. (2) 1900-04. (3) 1900-04. (4) 6 7 8 8 5 10 0.000 10 0.00	(8) 101 26 55 5 4 43 51 51 51 51 51 51 51 51 51 51 51 51 51	57 2 88 8 1 2 2 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Average Average duantity of fish curing the during the five years, 1909-10 to 1912-14.  (IO)  (IO)  (IO)  (IO)  (IO)  (IO)  (IO)  3,549  2,249  2,249  2,249  3,542  2,074  861  3,542  2,226  2,245	Remarks.
Agency ma	markets Agency markets and Tekkali about 10 miles	17	13	12	445	Fresh fish is taken to Parlakimedi. etc.
Local	Local markets within a radius of 15 miles 36 41 49 and Palkonda and Parvatipur.	- 35	8	52	1,211	Tariourinani Ann

-	
h	7

							C	97				
			Fresh fish is in demand	irom Chicacole, etc.			Fresh fish is taken by	patam, etc.	•			
593	1,940	865	579	843	3,968 3,968 1,564 477,2	3,127	2,296	978	:	2,695 463 1,046	1,171 1,396 1,283	6,280
32	30	29	H	32	4 0 % 0 %	103	69	73	94	56 35	55	35
39	30	20	13	:	36 36 33 33 33	140	74	. N	52	% 43 43	77 78 131	37
49	29	17	91		82 : : 42	130	11		64	: 63	1088	23
32	22	7	6	Opened in 1909.	: : : : 2, 2	95	57	:	:	13	33	χ.
22	61	:		Opened	:::48	:	:	:	:		10 27 29	41
82	13	:	∞0		: : : 39	;	:	:	:	:: : II	61 	35
Local markets within 20 miles and agency	Local markets within 20 miles and agency tracts.	Local markets within a radius of 15 miles	Do. do. and Palkonda.	Chicacole, 5 miles distant	Local shandies within a radius of 15 miles.  Do.  do.  20 miles.  Do.  do.  15 miles.  Local markets within 10 miles and agency	markets.  Local markets within 15 miles and agency	Do. do.	Purchased by traders at Vizagapatam, Madgole, Chodawaram and Salur	Local markets and villages and the agency as far as Jeypore and Nowrangapur.	Agency markets Adjoining villages as far as 20 miles Markets within 15 miles	Adjoining markets within 10 miles Local shandies within 25 miles Tuni and Nakkapalli, 7 and 12 miles,	Dowlsishwaren, Cocanada, Bobbili, Peddapur, Pittapuram, Samalkot and Rajanagaram and local shandies in the district.
:	:	:	:	:	:::::	:	:	:	:	:::	:::	<u>:</u>
:	;	eta	÷	:	: : : : :	:	eta	:	:	: : :	:::	
Kottarevu	Calingapatam	Komaravanipeta	Kurrempalli	Pukkillapeta	Allivalasa Chintapalli Mukkam Nagamayyapale m Bimlipatam	Kothuru	Montgomeripeta	Lawson's Bay	Srirangapuram	Gangavaram Jallaripeta Pudimadaka	Polavaram Rajiahpeta Pentakotah	Копарарарета
21	61	80	21	22	24244	80	29	30	31	333	35	% %

EAST COAST—cont.

Fish-curing yards, number of ticket-holders, markets, etc.—cont.

.1:					Numbe	r of tic	Number of ticket-holders-average during quinquennium.	lers—av naium.	erage d	luring	Average quantity of	
danu lsine	Name of yard.	yard.		Markets to which salted, etc., fish is supplied.	.68-28	·†6-06	.66-86	***********	`6o -\$o	.51-01	fish cured during the five years, 1909-10 to	Remarks.
s E	(2)			(6)	81 3	81 B	81 @	61 E	61 🛞	61 S	(01)	(11)
39	Uppada	:	:	Dowlaishwaram, Cocanada, Bobbili, Peddapur, Pittapuram, Samalkot and Raianagaram and also to levbore.	61	30	4	65	84	98	MDS. 12,302	
- 4	Godarigunta	:	:	Salur Sowlai	:	:	:	:	:	8 to	167	
14 24	Coringa Mogalturru	::	: :	Local markets within 15 miles  Weekly markets within a radius of 8 miles and Narapur and Palakollu, 6 and 12	::	::	. 12	11 8	14	2 ; ~	38 273	
24	Sorlagundi Nizampatam	::	::	miles.  Neighbouring villages Inland villages as far as Kepalli, Tenali, Bapatla and Ponnar above to miles and	::	::	: 8	:00	12	II ::	: <b>:</b>	
34	Lankavanidibba Kothapalem	g :	::	Masuipatam. Repalli, 20 miles; Masuipatam Masuipatam and inland villages as far as	484	99	34 4	30	, H,	::	341	
47	Chakicherla	:	:	Nepalii, Jenaii, romat anu dapata. Madras, Cumbum, Berwada, Markapur, Ramagrii, Udayagiri, Atmakur, Kandu- kur taluk markets	:	9	O.	2	19	81	643	

						- 7					
As the yard is near the Buckingham Canal, there is easy communication with Madras and other	places.				Fishing is carried on mostly in the Pulicat	lake. Fresh fish is sent to Madras by rail.	Fishing is carried on mostly in the Puli-	cat lake. Do,			This yard has been now closed. There are no fish-curing yards between Sattankupan which is at the northern extremity of the Ching-put district and Killaipattacheri the southern extremity of the Southern extremity of the Southern extremity of the Southern extremity of the South Arcot district.
541	488 313	979	1,949	1,171	1,035	1,514	2,348	3,360	3,949	1,581	537
9	3,0		•	319	11	61	6	36	35	38	91
Ħ	30 52	48	30.	2, 2,	12	40	H	38	41	42	:
21	19 :	36	22	5 G	91	33	11	33	52	35	:
25	: :		:	::	:	:	9	15	85	46	:
20	::	On an average within ten	:	: :	:	:	m	14	82	40	:
:	:	:5	:	::	:	:	:	11	9	56	i
Madras, Kavali, Nellore, Bitragunta and Allur.	Madras, Nellore, Bitragunta, Allor and			Z	40 to 50 miles. Madras and local villages	Madras and surrounding villages	Markets within 35 miles radius and Madras.	Markets within 40 miles radius, Madras, Tiruvallur. etc.	=	Markets at Madras, Red Hills, Poonamallee, Conleeveram and Ponneri.	≥
48 Tatichetlapalem	9 Mypad 50 Kodur	51 Nalattur	Kondurpalem	Ruliyanjerikuppam	56 Irukkam	57 Bhimalavaripalem	58 Medicalkuppam	59 Mangodu	60 Pulicat	61   Sathankuppam	62 Kadapakkam
4	4. x		ini	กรีก่	<u> </u>	ίζ	۲ <u>۲</u>	55	æ	5	8

# EAST COAST—cont.

Fish-curing yards, number of ticket-holders, markets, etc.-cont.

			Numbe	r of ticl	Number of ticket-holdersaverage during	lersav	erage d	uring	Average		
*201		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			quinquennium,	ennium.			quantify of		
Gerial num	Name of yard.	Markets to which sailed, etc., usn is supplied.	.68-28d1	.46-0681	66-5681	·40-0061	·60-S061	1910-13-	during the five years, 1909-10 to 1912-14.	Remarks,	
	(2)	(3)	(4)	(3)	9	3	(8)	6	(10)	(11)	
}									MD5.		
25	63 Killaipatnacheri	_≥	 :	:	į	:	:	12	718	Fresh fish is taken	,,
64	Neidavasal	Markets within a radius of 16 miles	:	:	93	56	91	:	:	• ( )	
35	Vanagiri	Do.	:	:	:	24.	41	32	1,895		
66	Tranquebar Akkaraikuppam (Nega-	Local mar	91	36	: 4	ž 24	32	13	: :		
89	palam). Arcot Thorai	F	:	:	:	39	39	44	973		
69	Muttupet	<u> </u>	17	18	23	27	22	21	:		
2	Point Calimere	<u> </u>	н	61	4	7	∞	<b>∞</b>	717		
72	Adirampatnam Malliapatnam	77	<b>^</b> :	<b>1</b> :	17	==	 	10	910,1		
73	Sethubhavachatram	and rudnkkoltal State.  Local markets within 5 to 7 miles, Arantangi and Pudukkottal State.	:	:	12	:	:	9	1,981		

	_	_		_	-										-					_
1,174	:	1,525	1,885		(	3,223	2,439		2,354	707	33434	5,379	¢	3,380	2,188	1	7,231	9	904	739
<b></b>	10	6	•		4	-00	12		17	;	1	0		14	8		:	;	61	:
_	3	7	7		. 7	41	31		81	,	t	13		13	38		:	1	23	24
7	5	7	45		32	35	33		18	24	5	21		13	:		:	į	32	21
6	91	43	61		:	:	:		14	,	ç	61		I	:		:		21	12
:	14	32	919		:	:	:		6	ç	4	17	,	9			:		24	
:		3.5	61		:	:	:		7	, e	ç	6		15	:		:	1	25	7
74   Vadakkammapatnam  Local markets within 40 miles, Tanjore and   Pudukkottai State.	Local markets as far as 40 miles	Local markets within 32 miles	Markets at Avarendal (20 miles), Rāmnād	(12 miles) and Paramakudi (35 miles).	Paramakudi markets	Do	Markets at Kadaladi (6 miles), Kanudi (21	miles), Nagalapuram (20 miles) and l'aramakudi (30 miles).	Nagalapuram (20 miles) and Kanudi (25	miles), Kulattur (a miles) Nama anuram (18 miles)	and Ettavapuram (24 miles).	Markets within a radius of 45 miles and	Colombo	Local markets within 12 miles and Colombo.	Markets as far as Singikulam (31 miles)	and Palamcottan (46 miles).	Markets at Singikulam, Palamcottah and	Kotlpatti.	Markets within 40 miles and Kolipatti	Markets within 40 miles radius
:	:	:	:		:	:	:		:		:	:		:	:		:	_	:	:
akkammapatnam	Pasipatnam	Nambuthalai	Attankarai		Rameswaram	Periathorai	Mukkur		I Vembar	Sinnikulam		3 Pinnakayal		adala1	55   Overi	1	o Idinthakarai	11:10:11	enpuli	Kuttanguli
Vad	75 Pasi		7 Atta		78 Ram				Ven	Sin		Pin	-	Ala	Š		Tain	4	o Tructapuli	Prat
7	50	2			60	5	2		۳	్ట		హ		<b>Z</b> .	ĸ	7	8	1	`•	9

# SECTION II. EAST COAST. BOATS and Catamarans.

								)						
mber.			Large		Number of	of.			Size and c	limension	Size and dimensions, etc., of boats.	oats.		
Serial nun	Name of yard,	- <del></del>	or small.	Dug- out canoes.	Built- up . boats.	Cata- mar- ans.		Length. Breadth.	Depth.	Стеw.	Cost.	Sails.	Weight of fish that can be carried.	Remarks.
							FBET.	FERT.	PEET.	MEN.	RS.			
-	Kasipur		Large	:	81	:	54	7	4	8—12	150	Bamboo	::	
			Small	:	12	;	27	v	4	m		rattee sail.		canoes and ratts
63	Prayagi	:	Small	: :	61 5	:	5. 4.	~~	4	7-14	150		:	Catamarans and
		•			?		7	5	4	m		2	:	dug-out canoes are
Ç.	Ganiám		Large		44	:	54	~	4	10-12	150	:	:	also used. There are small
:		=	Ď	: :	₹	: 3	7	<b>-</b>	4	ĸ	8	:	:	canoes (trunks of
		,			:	1	:	:	:	2-3	2	:	:	trees hollowed) of
			¢											varying size,
4	Goparpur	:	: 5	:	42	;	:	:	:	59	&	:	i	Fishermen them-
•				_										selves make their
<b>ئ</b>	Markandi	:	: Š	:	91	In use.	12	<b>∞</b>	41-5	4-5	ညှ	:	:	Doars and nets. One hundred
.42	Sonsour		Large	:	20	:	7	4		,				catamarans are
,		:	Small	:	:	30	ייי	,	:	9 (	ς,	:	:	also in use.
1	Patieonanir	_	Large		22	· :	2.42	טיר	: '4	N 0	12	:	:	Fishermen them-
•	and on one	:	Small	-		9	- 61	77	r †	9 0	20-00	:	:	selves make their
α,	Peddakarivani-	<u> </u>	Large		56	· :	: ::	200	: [	<u> </u>	8 (	:	:	boats and nets.
	palem.	ٽـ	Small	:	:	85	12-15	~	· :	3 6	2 1	:	:	
							•	•	-		77	:	:	

	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	•	:	:	:	:		:	:	:	:	:
-	:	:	:	:	:	:	:	:	;	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	: :		:	: ;	:	:	:	:	Ī
9			3 2	2	711	- - - - -	172	20,	7-10	50-00	2,5	3	0 1 10	3 1	· :	2	2 2	2		201-100	8 &	8 6	2 2	, 6	80-100	02	2		. 6	9I - 0I	2/1	2	3	9 6	25
8	6	· ·	01-10	,	1, 1	07.0	7. 01	֓֞֜֞֜֜֜֟֜֜֟֓֓֓֓֓֟֜֟֓֓֓֟֟֜֟֓֓֓֟֟֓֓֓֓֟֟֜֟֓֓֓֟֓֓֓֟֜֟֓֓֓֟֜֟֓֓֡֡֡֓֟֜֜֜֡֓֡֡֡֡֡֡֡֓֡֡֡֡֡֡֡֡	2 0	21-0	12-130		10-16		7-10	101	•	:	: ~	0	10112		8-12		16-20	7	-00	61	· ;	:		:	:	:	:
4	• ;		, «	١ ;	:	:	: 7	(c)	, ;;	41 h	, 1	ř -	77.				21	80	;;;	3 42	: "	; ر	: :		3-44	;	:		:	:	;		. "	,	:
9	6		۰,۰	~	ייר		0 6	٠,	J 1	, ,		. "			_	_		_	_		no	_	_		_			_		_	_		_	_	
15	¥	2,2	1,	12-15	7.	7 2	7		ب م	- L	26.	12	92	12	:		27-20	200	25 - 22	3, 23	2.12	11	_; 	:	25-33	13	24	15	95	15	9	- -	7 7		;
:	In use.	;		188		88	} ;	<i>y</i> <sub>2</sub>	:	:0	:	8	` :	&	:	8	` ;	5/8/2	3	,	:	22	:	55	}	9,	:	ŝ	:	55	:	8	:	5	<u></u>
24	:	* 2I	39	:	12	:	18		24	1	30	•	20	:	21	33	7		14	•	14	:	21	:	15	:	15	:	00	:	7	· :	14		
:	:	:	:	:	:	:	:		: ;	: :	:	:	:	:	:	:	:	:	:	. ;	: :	;	:	:	:	:	:	;	:	;	:	:	:	:	-
Small	: on	Large	Small	 0°	Do.	Do.	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	
Iskalapalem {		::			Coddmin	:::::::::::::::::::::::::::::::::::::::		:	Principles of	Manchiningpera.	Rhavaninad			- ' ::	Gunnidineta	]			Totalom	- managagiring	Komaravanineta		Kurramnalli		Pukkillaneta		lasa	`	apalli			- : -	moleculous ou	inggang))apparem i	
o   Iskale	_	IO Baruva	11   Raffioalum	-	10   12		To Dund:	13 L WILL	Y. Manne	14 Manc	re Rhave		16 Marrivada		T7 Gunn	7	18 L'attaronn	_	_	7	20 Koma		ZI Kurra	_	22 Pukki	_	23 Allivalasa	_	24   Chintanalli		or Milkem	_	Nogar	_	- !

\* These built-up canoes are really catamarans with a plank on each side forming a gunwale about 9" deep.
† In most cases the cost does not include the carpenters' wages as the fishermen themselves make the boats.

SECTION II—cont.

## EAST COAST—cont.

# Boats and Catamarans—cout.

		_		Ź	Number of	7			Size and	dimension	Size and dimensions, etc., of boats.	oats.		
Na.	Name of yard.	Large or small.		Dug. out	Built- up boats.	Cata- mar- ans.	Length.	Breadth.	Length, Breadth, Depth.	Crew.	Cost.	Sails.	Weight of fish that can be carried.	Remarks.
		_					FEET.	FEET.	FEET.	MEN.	RS.			
27 Bimli	Rimlinatam	て	:	:	13	:	:	:	:	15	25	:	:	
	··· mwadi		:	:	;	38	:	:	:	(1	~	:	:	
28 Kotte	Kotturn	_	. Se	:	12	:	;	:	:	15	<u>ک</u>	:	;	
		_	- -	:	:	6	:	:	:	81	/	:	:	
29 Mont	Montogomeripeta	_	::	:	9	: 4	:	:	:	15	25-50	:	:	
	•		:	:	:	3.	:	:		٠,	` 6	:	:	
Laws	to Lawson's Bay		:	:	23	: ٩	:	:	:	3		:	:	
			: =	:	,	102	:	:	:	:		፤	:	
Srirar	Srirancanuram	$\overline{}$	 :-	:	22	:	;	:	:	15-30	:	:	:	
	··· mennden	_	Small	:	:	232	:	:	:	81		:	:	
Cong	Candataran	ζ	:	:	22	:	39	9	4	;	30 - 50	:		
	e de la			:		192	14	4	н	:	30-40	:	:	
Talorineta		こ	Large	:	21	:	:	:	:	:	:	:		
יישישר   כני		$\equiv$		:	102	:	:	:	:		:	:	:	
	Pudimadaba	Ξ	Large	:	82	:	36	7	:	20	25	:	:	
+	and and and and	_		:	47	:	15	က	:	8	20	:	:	
	Polomorom	_	Large	:	82		.g	7	:	10-12	5	:	_ :	
33 + 0184	··· mara		::	:	114	:	12	4	:	2-4	10-20	:	:	
of Pails	Railehnete	二	Large	:	35	:	8	7	:	10-12	55	:	:	
	··· bodin	二		:	151	:	2	4	:	2 1 4	10-20	:	:	
27 Pentakota		Ξ	Large	:	20	:	င္က	47	:	ខ	8	:	:	
1	THOUSE	_	=			•		•			•			

Catamarans similar to those at Konapapeta are also	fn use. Palmyra dug-outs worked by paddle are also in use. Fishermen from Cocanada and Masulipatam also visit this locality for a few months for sea fishing.		
::::::	!!!!!!!!!!	:: :	2—3 tons.
::::::	     One white	sail. No sail. White cloth dyed dark brown.	black. Do.
12-20 65 to 125 20 8-12 12 65 12-16 30-120 2-3 30-50	3-6 1110 380 50 100 85 100 90 220 30 40 30 150 30 150	<b>:2</b> :	 50-100  100-150
12-20 1-2 20 12 12-16	15 15 35 35 35 812 812 2	10—12 2—3 10—12	2-3 10-12 2-3 8-12 
2 : 2 3 : 4 : 4 : 4 : 4 : 4 : 4 : 4 : 4 : 4 :	1:::::4	:: i	4   .ww
5-8 2-23 8-7-8 34-7	: ! ! ! · ! • 2 ! ! ! w	: :	:::
26—36 12—13 36 26 36 36	10 – 12 	:: :	2224 30
: 12 : : : : : : : : : : : : : : : : : :	    Do.	; " ;	8: 1.0
13 5 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	24 : 8 27 7 4 71 8 : : : :	2 : 6	; . H : :4
::::::	! ! ! ! ! ! ! ! ! ! !	11 1	1:: :: 1:
Large Small Small Large Small	Do Small Do Do	Large Small Large	Small Small Large Small Small Large Small
Konapapapeta { Uppada { Godarigunta	Mogaluru Sorlagundi Nizampatam Lankavanidibba Kottajalem Chakicherla Tatichetlapalem Mypaud Kodur	Kottapatam {	Monapalem Pulianjerikuppa Trukkam Bhimalavaripal
38	44 4 44444600		5 2

# EAST COAST.--cont. Boats and Catamarans—cont.

		Remarks.				Catamarans are also	in use.	Dug-outs imported	used here espe-	cially for river	Catamarans are also	used.						•
٠.		Weight of fish that can be carried.		About 14	tons.	°CT	:	:			:			:	:	:	61-91	
	oats.	Sails.		Cloth sail. About 14	ů	å	:	:	-		:	:	:	:		Cloth sail.		:
	Size and dimensions, etc., of boats.	Coet.	RS.	:	:	:	160	:			43	45	: :	830	:	80-350	400550	:
_cont.	Jimension	Crew.	MEN.	:	:	:	8-9	:	•		:	4-6	0 <u>-10</u>	48	;	9	- S	:
narans	Size and	Depth.	FEET.	:	:	<u>.</u>	:	:			水	:	:	:	:	:	:	:
boats and Catamarans—comt.		Length. Breadth. Depth.	FERT.	:	: i	š	:	:			7	:	:	:	:	4	:	:
oats an		Length.	FERT.	:	: 4	2	;	:			25	:	:	18-24	:	22	:	:
	٥ţ	Cata- mar- ans.		In use. In use.	Do.	:	: ,	22			:	In use.	ŝ	å,	8	:	:	12
	Number of	Dug- Built- out up canoes boats		In use	å	<u>:</u>		:			N	6	In use.	:	:	v	0	:
	Z	Dug- out canoes		:	:	:	:	n ase			:	:	:	:	:	:	::	:
		or small.	,-	:	: :	•	Small	:			Small	Do:	:	:	:	:	:	:
				÷	÷	•	:	Ī			:	:	:	:	:	:	_	=
		Name of yard.		Medicalkuppam	Mankodu Pulicat		Sattankuppam				53 Neidavasal	Vanagiri	Trandacoar	AKKaraikuppam	Muttingt	·i jadnija w	69   Point Calimere	
	, redn	Serial nur		85	629		2.6		-=-	<del>-</del> -		4,		 3.8	××	3	69	

	atamarens are made of three logs of wood fixed together in the shape of a boat.
	Catamarans made of three loof wood fix together in shape of a boat
100-12 tons.	
Cloth sail. Cloth sail Cloth sail Cloth sail. Cloth sail	Cloth sail.
350 30 – 200 75 – 100 30 – 100 200 – 300 225 – 350 30 – 350 10 – 60 600 – 800 10 – 60 10 – 60	25-100 500-700 500-700 30-100 30-110 6-30 55-110 55-110 15-40 15-40 15-40 15-40
2 4 - 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	a 1 4 4 4 4 4 4 4 4 1 4 \( \text{A} \) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
44:10 4444	ַ : : : : : : מּ֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖
:: : : : : : : : : : : : : : : : : : :	
30 10 10 335–40 335–40 34–54 11–13 11–13 11–13 30	15-21 20-25 21-26 18-07 18-07 18-24
F : : : : : : : : : : : : : : : : : : :	120 15 120 80 80 133 855 140 1140
4 30 119 119 119 119 119 119 119 119 119 11	41111111111111
::::8::8.78::4::1:::2:4	: :4::::4::::1::
Large Small Large	Small Large Small Do Large Small Large Small Large Small Do Large Small Do
# # # # # # # # # # # # # # # # # # #	
77 Malliapatnam 72 Setubhavachatram 73 Vadakkammapat- nam. 74 Pasipatnam 75 Nambutalai 76 Attankarai 77 Rameswaram 78 Periathorai	79 Mukkur 81 Sippikulam 82 Pinnakayal 83 Alandalai 84 Overi 85 Ginthakarai 86 Kuttapuli 87 Kuttanguli
5 7 2 2 2 2 2 28	0 8 8 8 8 8 8 8 8 4 8 8 8 8 8 8 8 8 8 8

#### SECTION III.

EAST COAST.
NETS, etc., in use.

						_	Ξ		(2)		(S)		(4)		(\$)	
						Medicalkuppam.	kupp	am.	Mangodu.	lı.	Pulicat.	i,	Sathankuppam.	pam.	Kadapakkam.	ai
	Nai	Names of nets.	lets.		-	Dimensions of nets.		Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	S Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Perivavalai				-							<u></u>		2	-	23 X 24 Bag.	BB
Turivalai	:	•	•	<b>!</b> .	:	:		:	:	:		: 	oen 72	<del>د</del> :	600 X 20 net	25C0
Badivalai	: :	: :	: :	: :	: :	: :		: :	: :	: :	÷ ÷	: :	30	:	115 X 23	8
/alavalai	:	:	:	:	:	;		:	:		:	:	:	: :	217 X 17	: ^
Madavalai	:	:	:	:	:	:		;	:	:	:	:	:		60 X 450	7.
Kattuvalai	:	i	:	•	Ĭ.	In use	:	:	In use	:	Jn use	•	:	:		:
Eruvalan	:	:	:	:	:	:		:	:	:	:	:	:	:	56 X 42	120
Siruvalai	:	:	:	:	:	In use	:	:	In use	:	In use	:	:	;	70 X 21	7
Kannivalai	:	:	:	:	:	:	_	:	:	:	ë.	· 	In use	:	256 X 16	28
Fengavalai	··· ···	:	:	፥	:	In use	:	:	In use	:	:	:	:	:	8 X	6
Nala of Acqu	V&VA.IAI	:	:	;	:	ġ	:	:		:	:	:	:	:	200 X 30	150
Ovivalai	:	:	:	: '	:	:		:	:	:		_	:	:	:	:
Kondavalai	: :	:	: :	: :	:	:	_		:	:		:	T	:	:	:
Maravalai	: :	:	: :	: :	:	: :		: :	:	:	36	: :	•	:	:	:
Kunnivalai	:	:	:	:	:	: :		:	: :	i ;	:	: :	i i	: :	:	:
Kolavalai (bag net)	g net)	:	:	:	:	:	_	:	:	:	•	:	:	:	9 X	*
Kulivalai	:	:	:	:	:	:	-	:	:	:	In use	:	:	:	: :	•
Visuruvalai or manivalai	manival	:	:	:	:	:		:	:	:	å Ö	:	:	:	:	:
Hooks and lines	:	:	:	:	:	:		:	:	:	Shore lining	:	Shore lining	:	:	:
									•		only	s,	si iluo			
											pracuseu.		pracused.			

#### EAST COAST-cont.

Nets, etc., in use-cont.

N.B.—Column I under each yard—Numerator denotes the length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes the cost of nets in rupees.

						(9)			( <i>i</i> )		(8)		(6)	
	Name	Names of nets.	a a	r				.	Neidavilla.	N	vanagin.		randneoar.	ii.
			,			Dimensions of nets-		Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
										88		rg.		R.S.
Designation	:							_	Bag. 21 X 21		Bag. 21 X 21		3	
t Cily avaida	;	:	:	:	:	:		=	Side 700 X 45	300	Side 700 × 45	<u>:</u> _	Bag. 150 X 0	:
Turivalai	:	:	:	:	:	In use	:	:	•	:		:	•	:
Edavalai	:	:	:	:	:	ϰ.	:	:	· \$9 × 96		In use	150	In use	<b>'</b>
Vellavalai (gi	II net)	;	:	:	:	:	_	:	126 X 42	9	X 4	9	840 × 12	•
Valavalai	:	:	:	:	:		_	:	91 × 129	30		8	In use	8
Kannivalat	:	:	:	:	:	:		:	In use	38	 0	35	 ۵	· :
Kala or Koduvavala	172 72 121	:	:	:	:	In use	:	:	:	:	:	:	:	:
Kunnivalai	:	:	፥	:	:	:		:	20 ft. long.	15	zo long.	15		:
Mulluvalaı	:	፧	:	:	i	:	_	:	In use	300	In use	38	ä	:
Pachalvalai	:	E	:	:	:	:	_	:	I So long.	2	150 long.	01	150 long.	:
Fallavalai	:	:	:	:	:	:	_	:	a × &	2	21 X 86	S.	:	:
Kolavajai (Da	g ner)	:	:	:	:	:	-	;	In use	131	In use	134	:	:
I ITUKKAIVAJAI	:	:	:	:		n use	:	:	:	:	:	:	:	:
Kulivalai	:	: <u>;</u>	:	:	;	ទំរ	:	:	:	;	:	:	:	:
Visuruvalai o	Many	B.13.1	:	:	:	Do.	:	:	;	:	:	:	:	:
Hooks and lines	59	:	:	:	:	മ്	<u>:</u>		Line 100 yards	-	In use (same as	:	" Tundimalla	:
								_	long. Bait and				used 20 miles	
									practised.	annas to			from shore.	
							_			Rs. 1-8.				
			į		-		-	-						

#### EAST COAST—cont.

Nets, etc., in use-cont.

N.B.—Column I under each yard—Numerator denotes the length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes the cost of nets in rupees.

		(10) Akkamikuppam.	ä	(11) Arcot Thorai.		(12) Muttupet.		(13) Point Calimere.	
Names of nets.	rå.	Dimensions of nets.	Cogt.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Bag or drag nets.	13		RS.		RS.		RS.		MS,
Edavalai	:	180×180	80-100		:		;	•	:
Kittivalai or Rangivalai.	valaí.	•	í	In use	7-12	00×12 to 15	7—12	:	:
Koduvavalai	:	•	:	pieces to 8	23 B	. !	:	15 to 20 pieces 36X6 to 8	23 a
Mullamvalai	:	In use	150-250	s !	:		:	· :	:
Vellavalai	:	120 X 12	30- 60	•	:	120 X 12 to 24	:	•	:
Wall and drift nots.	ets.								j
Adappuvalai	:		 _: 		:	In use	15-30		:
Kalavalai	:		:	120 X 18 to 24	8 & piece.	:	`:	120×18 to 24	8 a piece.
Kannikkavalai Paduvavalai	::	In use	::	S .	::	In use oor and	25 - 50	الان الان الان الان الان الان الان الان	::
Pendavalai	:	9	:	20 pieces 6c to 90 X 12 to 27	6 a piece.	•	:	20 pieces 60 to 90 X I2 to 27 4	6 a piece.

:	4½ a piece.	54 a	115	•
	5 to 6 pieces 120 X 12 to 18	5 to 8 pieces 120 × 12 to 24	400 to 600 X 12 to 24	In use (same as in Arcot Thomi).
:	5 a.	:	:	:
In use	15 to 25 pieces 5	21	••••	
:	4½ a.	5\$ a piece.	114	:
	5 to 6 pieces 120×12 to 18	5 to 8 pieces 120 × 12 to 24	400 to 600 X 12 to 24	Shore lining and deep sea lining. The former 200 ft. long with a single hook and the latter 2,400 ft. long and 200 hooks.
:	:	:	25-30	:
***		!	80×6	Single hook lining and deep sea- lining—1,000 yards long the latter,
:	:	:	:	:
:	:	:	:	
Sippivalai	Tırukkaivalai	# Ullamvalai	Valavalai	llooks and lines

# SECTION III—cont. EAST COAST—cont.

Nets, etc., in use-cont.

W.B..-Column I under each yard-Numerator denotes the length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes the cost of nets in rupees.

	(14)		(\$1.		(16)		(17) Voderbenmenninen	, de
	Adirampatnam.	ä	Malliapatnam.		Sethubhavachatram.	Ta H	Vadakkamuspri	
Names of nets.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Bag or drag nets.		RS.		RS.		RS.	ı	KS.
Kattuvalai (Silavalai or Arakuttivalai.)*	•	:	Bag 4" mesh.	:	Bag 4" mesh. 120X9	150200	: ;	:
Kittivalai or Rangivalai.†	60X12 to 15	10—12		;	•	:	52×12	15 15
Odasivalai *	In use	50-200	Bag 4" mesh. 300X15 to 18 I to 14	300	:	:	300 to 450 X8	200-250
:								
Wall and drift mets.								
Adamvalai	In use	50 200	•	:	:		9×011	:
Koivalai or Magavalai	50×10	30-50 In use	In use	2	•	:	1	r3
Kannikkavalai	•	:	•	i	:	:	300°	νn ' ¦
Kendaiwlai	•	:	:	:	:	:	12 X 201	piece.
Mumlvalai	•	:	:	:	:	:	6	0.

:	:	:	6 a piece.	7 a piece.	15-20	:
•	•		2 to 3	170X111	300×18	In use
8	84 a. piece.	:	:	:	ra—r34 each	
ro pieces 90X6	15 to 25 pieces 120 X 12 2	į	;	:	7 to 9 pieces	7 
25—50	:	:	:	:	30	:
I5-50 LOX8 main portion.	•				3 to 4 pieces	o :
15—50	:	ιŋ	:	:	15-25	:
In use		120X8 2	:	If to 25 pieces rao X 10 24 to 5	100 X 10	
:	lvalai	:	:	i	:	:
:	(Savalai).	÷	:	;	;	Se .
Paduvavalai	Pukkattuvalai (Savalvalai or Kandalvalai).	Sippivalai	Suravalai	Tirukkaivalai	Ullamvalai	Hooks and lines

\* Like "Peruvala" of Malabar. † Like "Koruvala". † Like "Koruvala". † Also use a spear with 5 hooks fastened to a rod about 15 ft. long for spearing large fish.

### EAST COAST—cont.

Nets, etc., in use-cont.

N.B.—Column I under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes cost of nets in rupees.

g.	Cost.	:	:		:		:	:	:	:
(21) Rameswarani and Periathorai.	Dimension- of nets.	Bag 30 X 15 to 45	Wings X 45 to 175 Wings X 45 to 175 Rose 1 to 4" to 6"	warming to the state of the sta				•		60 to 180 X 20 to 30 I to 3
	Cost,		:		:		:	i	:	:
(20) Attankami.	Dimensions of nets.	Bag 30 X 15 10 45	1,500 to 2,500 Wings X45 to 175 4, to 6/ Rope 1 to 4 or 5	furlongs			•	!		60 to 180 X 70 to 30 1 to 3
	Cost.	 Rs.	8	~-	150		25	14	20	:
(19) Nambuthalai.	Dimensions of nets.	Wings 40 × 12 .	Pouch 20 X 10	Rope 900 Net 180 X 18	Sides 90	Rope 900	750 X 10	180 X 12	300 X 27	*****
	Cost.	, 88S.	8 		50-60		:	8 – 10	5 each piece.	i
(18) Pasipatnam.	Dimensions of nets.	Pouch 20 X 10	Wings 40 X 12	Ropes 900	375 × 6		:	4 to 6 pieces 120 X rol	4 to 5 pieces * ITO X IZ	2
	 .v1	ets.	alai		alai or	nets.	:	(Sanal-	:	:
	Names of nets,	Bag or drag ucts.	Karaivalai or Oiavalai		Kattuvalai (Silavalai or Arakuttivalai).	Wall and drift nets.	Kattavalai	Pukkattuvalai ( valai).	Tirukkaivalai	Valivalai

ŧ	ŧ	÷	
		-:	
•		÷	
		In use	
i	,	:	
		:	to rç
į	į	i	15 Rs. 10
-		In uge	22 X 44
6-I0	7-9	i	Small =
150 X 8	*   4*	•	There are two kinds, i.e., big and small. Small = 225 X 15 Rs. 10 to 15.
g	:	:	two kin
	:		re are
4 to 5 pieces 150 X 8	In use	•	• The
:	Blai.	:	
:	nef. Rangiv nef.	:	}
Vellavalai	Shore net. Kuttuvalai or Rangi <b>valai.</b> Cast net.	Vichuvalai	

#### EAST COAST—cont.

Nets, etc., in use—cont.

N. B.-Column 1 under each yard-Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes cost of nets in rupees.

	(22)		(23)		(24)		(25)	
,	Mukkur.		Vembar.		Sippikulam.		Pinnakayal.	
Names of nets.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Bag or drag nets.	(M. J. 54 X 30			RS.		RS.	(Mc.4; 36 X 17	RS.
Madivalai			In use	70—120	In use	70—120 { Thattu	Thattu 66 × 42 Iluppu -180	8
Wall and Drift nets.								
Kalangattivalai (Stake net).	. !	; 	240 to 300 X 3	15-20	300 X 240	15 - 20	:	:
Kalattuvalai	:	:	:	;	:	;	pieces of 90 X 24	90
Kolzvalai	:	:	:	:	66 × 24	12—15	7 pieces of 84 × 33	<b>2</b> 2
Pachuvalai (gill net)	:	:	:	:	80 X 18	6-7	ĝos :	:
Valavalai	:	:	100 X 24	00	100 X 24	00	5 pieces.of 90 X 24	20
Vengadaivalai	:	:	:	:	1	:	6 pieces of 95 X 30	33

Shore net.		_						
Kollavalai		:	***************************************	•		:	60 circum. X 30 deep	25
Kuttnvalaı or Rangivalaı.	:	:	In use, 3" mesh.	9	6 In use, 1" mesh	9	50 X 10}	13
Cast nets.								
Vichuvalai	:	:	:	:	:	:	In use 1 mesh	
Hooks and lines	****	:	;		•	:	In use	
			_	_		_		ı

### EAST COAST-cont.

Nets, etc., in use-cont.

6-7 each piece. 25-60 å : : Cost. RS. : Wings if feet... N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator shows size of meshes in inches. Column 2 denotes cost of nets in rupees. Kuttanguli. Wall 210 feet... Rope 108 ... : : 10 pieces of 60×21 6 pieces of 66×21 Dimensions of nets. : : • : Bag 3 : : : : : Cost. : : eet. Kuttapuli. Dimensions of nets. 28×18 : Wall 216 Rope 108 : : : : : : : : : Cost. : `: : Idinthakarai. eet .. : Wings 60 feet Dimensions of nets. 78×18 1 24 24 : : Wall 210 Rope 108 : Bag 39 ፥ : : : : : Cost. Bag 39 ... Wings 66 feet... Wall 24 Rope 108 ... Overi. Dimensions 25 X21 81×82 (27) 78×36 : of nets. : 30 g 8 20 **≯** 50 ₹ : : Cost. ŖŞ. | Thattu | 66×42 | 5 | 1 | 1 | 1 | 5 | ... 6 pieces 96×30 ... | 5 pieces 80X24 3 pieces 90×24 ... 7 pieces 84×33 Alandalai. Dimensions of nets. 97 : ١ : : : \* Wall and drift nets. Bay or drag nels. Names o nets. Vengadaivalai ... : : : : : i Kazharvalai \* Kalattuvalai Salaivalai Valavalai Kolavalui Madivalai

	; ;		in 1-8-0 per doz. 3 as. per doz. 1 anna per doz.		
			In use.  Biggest hook 7" doz. 3 as.  Medium , 34" I anna Small hook I to per doz. 2".		
	:	:	::	_	
	:	:	In use (deep sea and shore lining).		
_	:	:			
_	!		In use (deep sea and shore lining).		
-	:	:	11		
•	:	30×2+	In use Deep sea lining, shore lining and single hook lining.		
	25	13	٠ :		
	60 circamference × 30 deep	50 × 10}	In use, 4" mesh. In use (only in October).		
	:	;	1 1		
	Shore net.	Kuttuvalai	Casting nets. Vichuvalai Hooks and lines		

Sravuvala in Malayslam.

# SECTION III—cont. EAST COAST—cont.

Nets, etc., in use—conf.

N.B.—Column I under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees.

		(31)		(32)		(33)	. (34)		(35)		(36)	Ì
Names of nets.	ن	Kasipur.	Ħ	Prayagi.		Ganjām.	Gopalpur.		Markandi.		Sonnapui.	;
ļ		Dimensions Cost.	Cost.	Dimensions of nets.	Cost.	Dimensions Cost.	Danensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
Bag and dras nets	lets.				; :			RS.		RS.		RS.
Peddavala				Bag 39×18	_	Bag 39×:8	I,000 × 24	ដុំ	I,000X24	9	150- 1.280X12	200
Iragavala		;		Sides 960 × 27			100 X 40	S F	100 X 14	8 2	15 In use	
	: :		:	:	:	: :	go diameter .	8-9	8-9 go diameter	8	30 dia-	:
	:		:	:	:	19X	go to 450×24	15-50	90 to 450X24 IS-50 90 to 450X24	15-50	S E	3
Maravala	:	:	:	:	:	105×105	:	:	i	:	i	:
Vontivala	:	:	:	45×15	:	# to 1 #:	:		:	:	:	:
Voharthivala	:	45×44	:	1 45×4 <del>1</del>	:	:	:	;	:	:	÷	:
Kadisavala	:	45	:	1 45×12	:	:	•	:	:	:	i	:
Gotchavala	:	ω.	:	30×12	:	:		:	:	:	i	:
Nadipivala	:	37½×12	:	374×12	:	-	:	:	:	i	į	;
		-	_									

:	:	ŧ	i	:
:				
In use	:	•	:	:
•	:	:	:	:
:	•	•	:	In use 60 ft. from shore and 500 ft. from anchored catamarans, z hooks each.
:	:	:	:	:
:	i	;	:	60 ft. from shore and goo ft. from anchored catamanns, 2 hooks each.
	:	:	•	:
:	:	:	•	Small extent.
	:	:	:	:
48×12	45×6	r4 diameter.	5oX3	:
:	:	:	:	:
1 10 2	45X6	14 dia-	50X3	:
:	:	:	:	:
:	:	:	:	linas
Kontivala	Siragavala	Isuruvala	Udduvala	Hooks and lines

### EAST COAST—cont.

Nets, etc., in use -cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees.

	-	(37)		(38)		(36)		(40)		(41)	
		Pattisonnapur.	ij	Peddakarrivanipalem.	Jem	Iskalapalem.		Baruva.		Battígalluru.	ļ
Names of nets.	Ä	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
	-		RS.		RS.		Rs,		RS.		RS.
Bag and drag nets. Peddavala		1280 × 12	200	Net only 480 × 60	300	Total length 1,280 Bag 12	175	Total length 1.280 Bag 12	175	Extending for rope foo Bag 12	500
						[ anol 489 ]		[ Length 68]		[ z2 × 7 ]	20
Iragavala	Bag	Bag 22×7 15-80	15-80	Bag 22×7	- 21	[0]	:	Rope 300	13	{ 50 × 12 }	35—40
Kavalavala	:	· :	:	30 radius	2	30 radius	13	30 radius	12	30 radius	12
Kattavala		180 to 240 ×	8	120 to 180 × 15 to	9	180 × 15	9	180 × 30	9	120 to 180 × 15 to 30.	9
Kontivala	:	00 to 75	:		:	In use		:	:	:	:
Hooks and lines	Dee she	Deep sea and shore lining practised, line 30 to 40 yds. long.	Hook I anna and line line 8 an-	In use (deep sea and shore lining practised, line 30 to 40 yds. long) 6° iron hooks used for sharks.	Ilook I anna and line 4 to 8 annas.	Hook In use (deep sea 1100k Deep sea lining I and shore lining I anna and shore lining I anna to 40 yds. long) line to 40 yds. long 4 to 6 iron hooks 4 to 8 annas.		In use sea and lining tised. 40 yds.	(deep Hook lining ranna shore prac- line 30 to 4 to 8 long).	In use (deep sea lining and shore I lining practised. 30 to 40 yds. long).	Hook lanna and line 4 to 8 annas.

#### EAST COAST-cont.

Nets, etc., in use-cont.

N.B..—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees.

		(42)		(43)		( <del>44</del> )		(45)	
Names of nets.		Geddum.		Pundi.		Manchinillupetta.		Bhavanipad,	
		Dimensions of nets.	Cost.	Dimensions of nets,	Cost.	Dimensions of nets,	Cost.	Dimensions of nets.	Cast.
Bag and drag nets.	:45.		ß		33.		RS,		RS.
Peddavala	:	Total   1,280   Bag   1,2	8	(Total length. 960 Bag. I to 14	2 2 2 3	960 × 30 I to I¥	200	970×30 1 to 1§	roo
Ingavala	:		15	51 × 27 39 lo	00	51 x 27 39 long sides.	20	In use	10-15
Kavalavala	:	:	12	In use	:	n use	:	Do	:
Kattavala	:	120 to 180 × 60 to 75	9	220 × 36	15	224 × 36	15	150 to 210×90	20-30
Kontivala	:	In use	:	In use T		<b>.</b>	:	In use (150 long)	3-5
Maravala	:	:	:	Do	8	:	:	•	:
Siragavala	:	:	;	:	:	In use (13z long at one	or I	to In use (135 long)	6-IO
Hooks and lines	;	In use (deep sea Hook Deep sea lining lining and shore I anna lining marrised on and	Hook I anna	Deep sea listing	;	end, lo use deep sea imiog.	:	In use	:
		to 40 yds. long).	lioe 4 to 8						

### EAST COAST—cont.

N.B.—Colum Colum	1 under each yard—	Numera net in r	Nets, etc., in use—cont.  N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches.  Column 2 denotes prices of net in rupees.	Nets, etc., in use— <i>cont.</i> otes length and breadth of nets	f. ts in fect. Denomi	nator denotes	size of meshes in i	nches.	
	(46)		(47)		(48)	j	(49)		
Names of nets.	Marrivada,		Guppidipeta.		Kottarevu.		Calingapatam.	tam.	
	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	
Bag and drag nets.		Z.	CBog 20 X 20 to 27	, 28.	Bag 27×10×26	RE.	27X36X20	RS.	
Peddavala	935×15 1 to 13	8	Side 150×30	100-150		100-120	Bag 4 Side 150×30	:	77
Itagavala Kavalavala	In use Do	10-15	12×21 21×21	01-8	Side 130×30 21×21 21×21	::	21×21 144 circumference	%-10 01-8	
Kattavala	150 to 210×90	20-40	180×90	30	180 % 90	8 .	180×90	8	
Kontivala Siragavala	In use 3 to 48 circum-	3-5	<b>*</b>	::	kri	::	In use	8-15	
Visuruvala Hooks and lines	In use	: ;	In use (Line 200, and hooks 3 to 12" long).	Small books 3 to 9 pies, line 2 to 3	In use	::	In use. Line 200 and hooks 3 to 12" long.	Small hooks 5 to 9 pies, line 2 to 3	
			-	annas, big licoks I to 24 annas and line 8 annas.				annas, big hooks 1 to 24 annas and line 8 annas.	

### EAST COAST-cont.

Nets, etc., in use—cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of net in rupees.

Names of nets.   Cost.   Dimensions   Rs.		60		(51)		(25)		(53)	
Dimensions   Dimensions   Cost.   Dimensions   Cost.   Dimensions	Names of nets.	Komaravani	petta.	Kurrempall	ĵ.	Pukkilapeta	3	Allivalsa.	gi
The graph   RS,   RS,		Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
In use   I	Rag and drag nets,		RS.	27 X 36 X 20	RS.	27 X 36 X 20	RS.		RS.
Do 8 21 × 21	:	In use		Side 150 X 30	100-150	Side 150 X 30	100-150	.100-150 In use	:
## 180 X 90	: :			X	01-8 01-8	21 X 12	£ :	Iz to I5 X I2 In use	::
Do 3-5	:	Do.		06 × 08 <u>1</u>	20	:	;	:	:
Do In use. (Line 200 Small hooks In use. (Line 200 and hooks 3 to 12" 3 to 9 pies, and hooks 3 to 12" line 2 to 3 long).  annas, big hooks 1 to 2 annas, big hooks, 1 to 2 annas, and line 2 annas, and line 2 annas, and line 2 annas, and line 2 annas.		. ភូមិ		den ;	:	:		30 to 40 X3 to 4\$	15
jaco pres, and notes 3 to 12 line 2 to 3 long). annas, big hooks, 1 to 2		Ď.		In use. (Line 200	mall hooks	(Line 200	3)	In use	::
				long)	ji to y pies, annas, big hocks, I to 21 annas and line 8 annas.		to 9 pies, line z to 3 annas, big hooks I to z annas annas annas and line		

Nets, etc., in use-cont.

#### EAST COAST—cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees.

			9	6					
		Cost.	RS.	:	:	:	:	:	;
(22)	Bimlipatam.	Dimensions of nets.		In use	12×6	In use	15%	:	
_	ä	Cost.	Rs.	:	i	:	:	:	:
(\$6)	Nagamayyapalem.	Dimensions of nets.		Bag 72×45	Bag 24×18	: :	180 × 60	In use	In use
		Cost.	RS.	:	:	;	:	:	
(55)	Mukkam.	Dimensions of nets.		Bag 12×45	Bag 24X18 Long sides 6"	mesh.	180×60	In use	In use. (Long line roo' and hook size r to 7".)
	JH.	Cost.	RS.	:	:	:	:	:	:
(54)	Chintapalli.	Dimensions of nets.		Bag 24×15 Side 430 yards	2 reer		200	In use	:
	, in		rets.	:	:	:	÷	:	:
	Names of nets.		Bag and drag nets.	, Peddavala	Iragavala	Voddavala	Kavalavala	Poravavala,*	Hooks and lines

\* Same as Kavalavala but with bigger meshes.

### EAST COAST—cont.

Nets, etc., in use-cont.

N.B..-Column I under each yard-Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches.

	(28)		(65)		(09)		(61)	-
Names of note	Kothura.	, 1	Montgomeripeta,	ripeta.	Lawson's Bay.	ıy.	Srirangapuram.	
	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.:
Raw and draw wete				Rs.		RS.		RS.
San San							Bag 90 X 25	 
Peddavala	In use	i	In use	i	Net 450 to 840	700	Side 115	`: 
							, 3 feet.	
Iragavala	12 X 6	;	15 X 6	:	70 long	20—25	70 long	· :
Voddavala	In use	:	In use	÷		:	y. > 0%	÷
Kavalavala	15 X 8	:	8 X 21	:	360 × 30	35-40	a to I	3640
Kontivala	:	:	:	:	225 × 27	:	225 X SI	65
Visuruvala	:	ł	i	i	Rope, zi feet.  32 yards circumfer.	:	32 yards circum-	15
Hooks and lines	Big hook of 12"	:	in use. (Long line 100' and	:	In use. (100 to 200 yards line for	Hooks 3	In use (Ioo to 200 yards line	•
	sea. Small hooks of 2" for shore lining.		hook size 1 to 7".)		sharks. Single hook lining also practised.)		for sharks). Single hook lining also	
*11						to Rs. 2.	practised).	

#### EAST COAST-cont.

Nets, etc., in use—cont.

N.B.—Column 1 under each yard—Numerator denotes length and breath of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees.

1		(29)		(63)		( <del>b</del> g)		(65)		(99)		
S	Names of nets.	Gangavaram.	Ru.	Jallaripeta.	13.	Pudimadaka.	ej	Polavaram,	m,	Rajiahpeta.		
		Dimensions of nets.	Cost.	Dimensions of acts.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Din ensions of nets,	Cost.	
		   	R.S.	-	RS.		RS		RS.		RS.	
Peddavala	:	In use	:	• • • • • • • • • • • • • • • • • •	100-200	180 X 30	250	Bag 36 X 12	300	180 × 30	100	
Iragavala	:	Bag 30 long sides 60	J 16	84 long.	50-100	80 X IS	50-100	50-100 24 X 18 bag.	13	80 X 15	4	98
Kavalavala	:	In use	:	30 long.	20-30	In use	:	9 X 09	02	In use	:	
Madavala	:	:	:	:	:	24 × 18	2-3	:	፥	24 × 1S	2-3	
Kaduruvala	:	:	:	18o×4‡	40-60	:	:	;	÷	:	:	
Kilinvala	:	:	:	84 long.	30-100	150 X 12 2	14	:	:	450 X 16	23	
Sripivala	:	:	: —-	:	:	In use.	:	:	:	In use	:	
Kontivalæ	:	too to 120 X 2	0	60 lang.	30-50	70 X 6	15-25	60 X 4‡	v	70 X 6	3-12	
Arukuvala	:	:	:	:	:	100 X 11	25	In use	i	100 X 11	25	

Chirogallavala	:	In use	:	:	:	:	:		:	:	:	:
Visuruvala	:	Do	:	,	:	ì	60 X 14	w	:	:	60 X 14	٠,
Books and lines	:	In use. (I feet wit hooks.)	Line 400 h 3 to 5	4-8 annas.	feet with 3 to 5 annas. with rod. lining in books.  (2) Deep sea 3 to 4 annas hooks.  (2) Deep sea 3 to 4 annas hooks.  (2) Deep sea 3 to 4 annas hooks.  5 to 12 hooks hooks.  and 50 to 100 faithous line	dozen dozen hooks. 3 to 4 annas per dozen hooks.	Shore lining.		Deep sea lining Hook I U and shore anna lining pracand line tised. Sannas.	Hook I anna and line 8 annas.	I Used for inshore e fishing.	:

## EAST COAST-cont.

Nets, etc., in use--cont.

WB .-Column 1 under each yard.-Numerator denotes length and breadth of nets in feet Denominator denotes size of meshes in inches.

1	ij	Cost.	:	:	:	:	:	:	•	:	:	:
(70)	Godarigunta.	Dimensions of nets.	In use	In use	: .	į	:	60 to 75	5 to 7 pieces of 60 to 75X5 to 7	* ·	:	;
	da.	Cost.	88. 100-125	 1,700-1,850 In use	:	25 — 30	8	•	4-30	:	:	Small hooks 3 to 6 pies, big ones Re. I.
(69)	Uppada.	Dimensions of nets	270 \$ 10 2	3,660×50	₹1 01 <b>\$</b>	540×18	350×18	h+ ;	8X 60	÷.	:	Shore lining in use.
I	peta	Cost.	R6 100-125	1,700-1,850	•	25-30	20	•	4-20	25	4 to 6	6 pres to 2 anas per hook.
(89)	Konapapapeta	Dimensions of nets.	270	<u>۔</u> ي	In use	540 × 18	340×18	<b>+</b> ;	8 to 60	† 120X12	\$× \$× \$× \$	Shore lining at roo yards in the sea.
   		Cost.	RB. 100-200	÷	:				30-50		:	
(67)	Pentakota.	Dimensions of nets,	90 X 15 Full length one mile including	In use.	240 to 360 X 15	#1 to 1#	:		60 long.	:	:	In use
	Stells		:	 :	:	:	:	:	:	:	:	:
1	Names of nets		Peddavala	fragavala Alivivala	Kalinvala	Vaddivala	Kileluvala	Pusaluvala	Kontivala	Kaddnluvala	Isuruvala	Hooks and lines

## EAST COAST—cont.

# Nets, etc., in use—cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches, Column 2 denotes price of nets in rupees.

	(71)		(72)	<b></b> -1	(73)	!	(74:
Names of nets.	Coringa		Mogalturru.		Sorlagundi.	ıdi.	Nizampatan.
Ś	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.
			1	RS.			
:	:	:	In use	30-35	:	:	:
Gidasavala	:	:	:	:	:	:	60 X 24
							1 to 4
:		i	:	:	:	:	57 × 101
Vaddivala	In use	•	:	:	:	:	N.
:	:	:	::	:	:	:	130 × 41
Kadisavala	:	:	•	: 	•	1	8 \ I
Thatanamia		;			:	:	\$ 101 \$ 101
Dattappuvala	:	:	:	:	:	:	671 × 9
Kontivala	In use	:	120 X 4	8	•	:	<b>30</b>
			2		;	;	:
:	:	፥	:	:	:	ì	87 X 101
Janapuvala	:	:	:	:	:	:	120 to 135 × 4
Viguruvalu	:	:	54 circumference 15 long	4	:	i	24
Hooks and lines	In use; both deep sea and in shore lining.	:	o)a	:	:	:	:

## EAST COAST-cont.

Nets, etc., in use—cont.

N.B.--Column I under each yard.-Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2-denotes price of nets in rupes.

		(75)		176)		(22)		(78)	
alon to nome.		Lankavanidibba.	ibba.	Kothapalem.	ë	Chakıcherla.			ë.
names of nec	å	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
			RS.		RS.		RS.		R.
Nidavala		:	:		:	60 feet radius	200	In use	50
4	:	:	:	:	; ;		:	40 X 20 10 30 6 10 8	:
Gidasavala	:		25.	54 to 57 × 24	:	:	:		:
Panduvala	:	\$2 × 25	001	\$ 10 4 57 × 104	10-100		:	:	
Payavala	:	130 X 44	o I	120 to 130 X 4	10-100	į	:	!	i
Kadisavala	:	41 87 87 104	20	14 80 X 08	10-100	:	:	:	<b>!</b> ~
Dattapuvala	:	6 × 3	25	6X \$ Z9	;	:	;		:
Gadivala	:	84 × 10≜	. Is	§o × 28	:	:	:	::	:
Kondivala Kelulu, Manga	and	×	::		::	\$7 × 14	0291	30 to 40×6 to 10	: ;
Nettalu. Sannavala Janapuvala	: :	135 X 41	: 2	120 to 135 X 44	10—190	:	1:	to I" mesh.	20 <u>-5</u> 0
Hooks and lines	:	** ::	:	en in	i	In use	;	In use	•

## EAST COAST-cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of meshes in inches. Column 2 denotes price of nets in rupees. Nets, etc., in use-cont.

Tien in the second	(29)		(0g)		(8I)		(92)		
	Mypaud.		Kodur.		Nalattur		Kottapatam.	am.	
	Dimensions of nets.	Cost.	Dimensions of acts.	Cost	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.	
		RS.	-	, %		RS.		R5.	.IC
Peddavala	:		:	:	:	:	1,320	120	13`
Nidavala	100 X 100	50	100X100	50	50 X 50	16	48×54	đ	
Chikativala	403 X 20 to 30	į	400 X 20 to 30	:	₹ mesh.	16	05 X 20	30	
Kondivala	8 010	:	0000	:	50 to 80 X 5 to 15	4	ICOX 20 I to It	5-10	
Kelulu, Manga and 30 to 40X4 to 10 Nettalu.	30 to 40X4 to 10	ŧ	30 to 40 X4 to to \$ to 2	•	2	:	:	:	
Hooks and lines II	In use	:	In use	:	:	:	:	•	

## EAST COAST—cont.

Nets, etc., in use-cont.

N.B.—Column 1 under each yard—Numerator denotes length and breadth of nets in feet. Denominator denotes size of mashes in inches. Column 2 denotes price of nets in rupees.

		-	(83)		(84)	i	(85)	! }	(98)	}	(87)	
Names of nets.	of nets.		Kondurpalem.	÷	Monapalem,		Puliyancherikuppam.	ppam.	lrukkanı.		Bhimalavatipalem,	palem,
			Dimensions of nets.	Cost.	Dimensions of nets.	Š	Uimensions of nets.	Cost.	Dimensions of nets.	Cost.	Dimensions of nets.	Cost.
	   	_	Cet	RS.		RS.						
Peddavala	:	:	#" to 4	125	1,320 1, to 2	120	In use	<i>,</i>	:	:	:	:
Turivala	:	:		;		:		:	:	:	:	:
Nidavala	:	:	40 X 54	\$	:	:	:	:	:	:	:	:
Panduvala	:	:		:		:	In use	: <del>-</del> :	9 X oS	:	9 X 0S	:
Chikativala	:	;	2000 X 200	8	8 X 30	8	:	:	:	:	:	-
Kondivala	:	:	100 X 20	2. 	100 X 20	5-10	:	<u>:</u>	:	:	:	:
Kondavala	÷	:		:		:	In use	:	2 X X X X X X X X X X X X X X X X X X X	:	20 X A	:
Kallavala	:	:	:	:	;	;		:	Very small mesh.	:	150 X 6	:
Koduvavala		:	:	:	:	:	:	:	in use	;		-
Siruvala	:	:		:	:	:	In use	: :		;	In use	:
Sannavala	;	;	••••	:	:	:	::	:		:	:	:
-		_			_	_	;	_	_	_	-	-

#### SECTION IV.

#### METHODS OF CURING.

#### EAST COAST.

#### KASIPUR, PRAYAGI AND GANJAM.

Fish is cut open at the back (along the line of dorsal fins) and gutted. Salt is introduced largely into the body of the fish which are then placed in large earthen pots which are covered with similar pots and the joints rendered air-tight by clay plastering. They are kept in the pots for about 12 hours and then taken out, washed in salt water and sun-dried for three days except in the case of Kavala fish which is detained only for 24 hours. Small fish are gutted and brined instead of being salted.

Proportion of se	alt					
Large fish						I:7
Small ,, Dryage—	•••	•••		***	•••	1:10
Large fish		•••	•••			33 to 43 per cent.
Small "	•••	•••	•••	• • •		39 to 41 "

#### GOPALPUR AND MARKANDI.

Small fish such as sardines and nettalu are not cut open or gutted. Salt is rubbed on the fish and they are kept in a shed in earthen pots for one day. Then they are put out for drying for two days. Fish is generally cut and cleaned outside the yard. Large fish are first cut open, entrails removed, washed in sea water and salt is applied to them and kept in earthen pots for a night. Next day they are sun-dried and on the third day passed out.

Proportion of sait—					
Large fish	•••	• • •		•••	1:8 to 1:5
Small "	•••	•••	•••	••	I: 13 to I:8
Dryage— Large fish					30 to 50 per cent.
		• • •	• • •	••	go to go per cent.
Small ,,	• • •		• • •	• • •	50 to 60 ,,

SONNAPUR, PATTISONNAPUR, PEDDAKARRIVANIPALEM, ISKALA PALEM, BARUVA, BATTIGALLURU AND GEDDURU.

Small fish are cleaned with water, roused with sufficient salt, placed in wide mouthed pots, a little water is sprinkled on top, and are kept for a day, and sun-dried the next morning. Medium sized fish are cut open, entrails and scales removed and salt applied and then stacked in wide mouthed pots one after another sprinkling some salt between the layers. They are allowed to remain for a day and sun-dried the next morning. Big fish are cut open from head to tail through the back, washed in sea water, salt applied and kept in wooden tubs or big wide mouthed earthen pots for a day and sun-dried the next morning.

Proportion of se	alt					
Large fish			•••			1:8 to 1:6
Small ,, Dryage—	•••	•••	•••	•••	•••	1: 13 to 1:8
Large fish	•••					30 to 40 per cent.
Small "	•••		•••	•••	•••	40 to 60 "
T.4						

#### PUNDI, MANCHINILLUPETA, ALTHADA, MARRIVADA, GUPPIDIPETA, KOTTAREVU, CALINGAPATAM, KOMARAVANIPETA, KURREMPALLI AND PUKKILLAPETA.

Three methods of curing are adopted here. Very small fish are put into curing pots which contain water in which half the quantity of salt issued for the fish has been dissolved. The remaining quantity of salt is sprinkled over the fish after they are placed in the pots. Next morning or a few hours afterwards the fish is removed and sun-dried. Medium sized fish are not gutted. A small quantity of sea water mixed with half the quantity of salt issued is put into curing pots. Fish is then placed in layers and a little salt placed over every two or three layers and the remaining quantity of salt is spread on the uppermost layer. The pot is then covered up and the fish is taken out next morning and sun-dried. Big fish are cut open, entrails removed and rubbed with salt and kept in pots containing small quantity of sea water or is piled up on mats. They are dried as they are or sometimes after being washed Saffron and chilli powder is also rubbed over some of the bigger kinds of fish to improve the taste in Pundi and Manchinilupeta. If the fish is very large, longitudinal scores are made in the flesh and after being rubbed with salt, it is folded up and packed into large tubs or pots and weighted with heavy stones.

Proportion of s	alt-					
Large fish		•••	•••			I:8 to I:5
Small ,, Dryage—	•••	• • •	•••	•••	•••	I:20 to I:8
Large fish		•••	•••	•••		20 to 55 per cent.
Small "		•••	•••			40 to 60 ,,

### ALLIVALASA, CHINTAPALLI, NAGAMAYYAPALEM, BIMLIPATAM, MUKKAM, KOTHURU AND MONTGOMERIPETA.

Large fish are opened straight along the back and after removing the entrails salt is stuffed into them. They are then kept for a night and put out in the sun for one full day. Curers soak the small fish as a whole with proportionate quantity of salt dissolved in sea water in a tub and are kept for a whole night and sun-dried the next day. In some cases guts are removed with the forefinger after cutting the fish near the neck and then treated as above.

```
      Proportion of salt—

      Large fish ... ... ... ... ... ... ... ... ... I:10 to I:5

      Small " ... ... ... ... ... ... ... I:13 to I:7

      Dryage—

      Large fish ... ... ... ... ... ... 20 to 50 per cent.

      Small " ... ... ... ... ... ... 27 to 60 "
```

#### LAWSON'S BAY.

Very big fish are cut into pieces, which are placed in pots in layers and salt is sprinkled between the layers. They are allowed to remain in salt for about 15 hours and then sun-dried for about three days. Big fish such as seer, etc., are cut open on the ventral side longitudinally and gutted, stuffed with salt and after 12 hours are sun-dried for about 36 hours. Small fish are thrown into a

receptacle containing brine and allowed to soak for about 12 hours and sun-dried.

Proportion of sa	lt—				
Large fish	•••		•••	•••	 I: I3 to I:7
Dryage—					
Large fish		•••		•••	 29 to 56 per cent.

### SRIRANGAPURAM, GANGAVARAM, JALLARIPETA AND PUDIMADAKA-

Salt is applied to the fish after they are gutted and cleaned and they are then packed in tubs. They are afterwards dried. Small fish are brined.

Proportion of se	ılt—					
Large fish		•••	•••	•••		I:8 to I:5
Small "	• • •		•••	•••	•••	I:13 to I:7
Dryage						
Large fish				•••	•••	29 to 60 per cent.

#### POLAVARAM AND RAJIAHPETA.

Nettalu which is caught in large quantities is dried in the sun for a day by spreading them on sand. Other kinds of fish are cured as follows. The scales and the entrails, etc., are removed. Fish is then thrown into a pot containing powdered salt mixed with a small quantity of sea water and allowed to stand for 24 hours and then sun-dried.

Proportion of sa	ılt —				
Large fish	•••	•••	•••		I:8 to I:7
Small "	•••	•••	•••	•••	I:10 to I:8
Dryage— Large fish	•••	•••	•••	•••	25 to 50 per cent.

#### PENTAKOTA.

Big fish are gutted and cleaned and powdered salt is applied to them and after a day are sun-dried. Small fish is simply thrown into strong brine and sun-dried after about 16 to 24 hours.

Proportion of s	alt—					
Large fish		•••		•••		
	•••	•••	•••	•••	•••	1:8
<i>Dryage</i> — Large fish		•••		•••		30 to 50 per cent.

#### KONAPAPAPETA, UPPADA, CORINGA AND GODARIGUNTA.

The curers remove the scales of the fish and gut them in their houses prior to bringing them to the yard. The fish is then placed in the curing tubs in layers of 4 to 6 inches thick with some salt laid over them, then another layer of fish is placed and more salt and so on up to the required height in the curing tub. Over the fish thus packed some sea water is poured. The fish soak in brine throughout the evening and the night, and the next morning they are removed from tubs and laid out on the ground each fish

separately to dry, and on the following morning they are passed out of the yard. Big fish are not gutted in the houses but are brought straight to the yard and undergo similar treatment. Some fish such as sharks and eels are gutted and cleaned and kept overnight and salted only the next morning. This is supposed to "season" the fish. The curing tubs are made of the lower portions of the trunks of palmyra trees hollowed out. The tubs are washed after each operation and stale brine is thrown out. The curing tubs are arranged in the open exposed to sun and are protected by coverings of palmyra leaves.

 Proportion of salt—

 Large fish ...
 ...
 ...
 ...
 1:7 to 1:5

 Small ,, ...
 ...
 ...
 ...
 1:8 to 1:7

 Dryage—

 Large fish ...
 ...
 ...
 ...
 33 per cent.

 Small ,, ...
 ...
 ...
 ...
 50 ,

#### MOGALTURU.

Fish is slit open from head to tail on the back, washed in sea water, then longitudinal scores are made in several places and powdered salt is well rubbed into the fish; it is then folded up and packed in layers in palmyra dug-out tubs about 2 feet diameter and 4 feet deep. The pile of fish is usually weighted with heavy stones and the trough is then closed by inverting a pot over it. Next morning after being washed in the self formed brine it is sun-dried on palmyra mats for one or two days. Small fish are simply gutted and washed and roused with salt in the tubs. Stones are placed on the top of the fish and they are sun-dried the next day.

 Proportion of salt—
 ...
 ...
 ...
 ...
 ...
 ...
 1:5

 Small " ...
 ...
 ...
 ...
 1:8

 Dryage—

 Large fish ...
 ...
 ...
 ...
 33 to 50 per cent.

#### NIZAMPATAM, LANKAVANIDIBBA AND KOTHAPALEM.

If the catches are landed within a short distance they are brought at once to the yard and gutted. If not they are split open, cleaned and scored longitudinally at the place they are landed and a little salt is applied to prevent putrefaction. When brought to the yard they are dried for a short time before salt is applied and then stacked on platforms made of palmyra leaves and the self formed brine is allowed to drain out. Salt is applied daily for three days successively and the fish kept again in the sun for drying. After it is dried, the fish is washed again and the salt still appearing over it is removed before the fish is let out. The fishing grounds are at some distance from the villages and the fishermen carry with them bazaar salt to apply to the fish to prevent taint.

#### CHAKICHERLA.

Fish is gutted, cleaned, salted and kept for about 12 hours and then washed again in salt water and sun-dried.

Proportion of salt-	-			
Large fish	•••	•••	•••	 I:8 to I:4
Small "	•••	•••	•••	 I:10 to I:7
Dryage—				
Large fish		• • •	• • •	 30 to 50 per cent.

#### TATICHETLAPALEM, MYPAUD AND KODUR.

Small fish are gutted, washed in sea water and soaked in strong brine during the night in earthen pots. Next morning they are taken out, washed and dried on the sand for 36 hours. Big fish are cut open and after washing are rubbed with salt and folded and hung up in palmyra leaf baskets for the night. In the morning they are washed and dried out on reeds. Big fish are not placed on the sand to dry as they get baked but they are put on rushes or reeds to allow of free ventilation from underneath. The coarser kind of big fish like shark, skate, etc., are cut into slices and rubbed with salt and undergo the same treatment as above.

Proportion	of s	alt—	•			
Large	fish	• • • •	•••			 I:8 to I:5
Small	91		• • •	• • •	•••	 1:10

### NALATTUR, KOTAPATAM, KONDURPALEM AND MONAPALEM.

Big fish are cleaned in the fishermen's houses before being brought to the yard where they are salted and kept in earthen pots or jars. Next morning they are taken out, washed in sea water, some more salt is applied, then dried. On the third morning also they are taken out and sun-dried. Small fish are dried in the shade for a few hours before being taken to the yard and undergo the same treatment as big fish. Small fish are not gutted.

```
      Proportion of salt—

      Large fish ... ... ... ... ... ... ... ... 1:8 to 1:4

      Small ,, ... ... ... ... ... ... ... 1:10 to 1:8
```

#### PULIYANCHERIKUPPAM, IRUKKAM, BHIMARPALEM, MEDICALKUP-PAM, MANGODU, PULICAT, SATHANKUPPAM, KADAPAKKAM AND KILLAI.

Big fish are gutted, cleaned and salted in tubs or casks for 24 to 48 hours and sun-dried on the next morning after being well washed. Small fish are salted without being cut and the guts removed.

```
      Proportion of salt—

      Large fish ...
      ...
      ...
      ...
      ...
      1:8 to 1:5

      Small , ...
      ...
      ...
      ...
      1:10 to 1:8

      Dryage—

      Large fish ...
      ...
      ...
      ...
      25 to 40 per cent.

      Small , ...
      ...
      ...
      ...
      30 to 50 ,
```

#### NEIDAVASAL. VANAGIRI AND TRANQUEBAR.

Large fish are cut open, cleaned, salted and kept in baskets. Small fish are cleaned and packed in layers of salt in baskets. They are removed from the baskets either immediately if the fish is brought during the day or after 12 hours if brought in the evening, and dried in the sun for 24 to 48 hours according as they are small or large.

Dryage-26 to 30 per cent. Large fish Small " 38 to 40

#### AKKARAIKUPPAM AND VADAKKAMMAPATNAM.

Very small fish are not brought to the yard, as they are simply sun dried. Big fish are split open by a longitudinal incision on the back a little to the right or left of the median line, entrails are removed and washed in sea or back water whichever be nearer. The heads, bones and fins are not removed. The viscera of all cartilagenous fish (ray skates, saw fish and dog fish) are separately cured by the ticket-holders in their houses with duty-paid salt since they are esteemed as a nutritious diet to puerpural women and to convalescents. The eggs of cat fish are salted separately and eaten. The guts are thrown away as refuse and are not collected and used as manure. Occasionally Pariahs gather them to be cooked and eaten.

There are three methods of curing adopted here--

(a) Dry curing.—After gutting and cleaning salt is sprinkled over layers of fish and they are exposed to sun for 18 to 24 hours.

(b) Shade curing.—After gutting fish are taken to the yard without being washed, and salt is sprinkled on them. They are left on the floor of the curing shed in which condition they remain for four or five days. Then they are removed and gently dipped

in water, sun-dried for an hour or two and leave the yard.

(c) Pit curing.—Fish after being gutted and cleaned are placed in layers in pits with a mat lining at the bottom, and sometimes at the sides also and salt is thickly sprinkled between each layer: another mat is then placed on the top and the whole is covered over with mud. Next day the pit is opened and the fish is well rubbed with salt and it is repacked and left in the pits for three or four days till the salt is completely dissolved. Fish thus cured is for distant markets such as Tanjore, Trichinopoly and Orattanadu.

Proportion of salt-Large fish ... Small 1:7 Drvage-Small fish ... 24 to 34 per cent.

#### ARCOT THORAI AND POINT CALIMERE.

Fish after being gutted and cleaned and rubbed with powdered salt are placed on the ground in layers on mats or gunnies and weighted with heavy stones. Sometimes the fish is placed in pits or earthen pots buried in the ground as at Point Calimere. During day time it is taken out and dried, and at nights packed again. This process is repeated for three days in the case of big fish and two days for small ones.

```
      Proportion of salt—
      ...
      ...
      ...
      ...
      ...
      1:5

      Small " ...
      ...
      ...
      ...
      1:10 to 1:7

      Dryage—
      ...
      ...
      ...
      25 to 30 per cent.

      Small " ...
      ...
      ...
      30 to 32 "
```

#### MUTTUPET AND ADIRAMPATNAM.

Big fish are slit open and gutted at sea by the fishermen as soon as they are captured. When brought to the yard they are further split by making three additional incisions to the right or left of the back bone. After this they are washed in salt water. The fish are cured in pits constructed of brick and cement and which being situated in sheds are protected from the sun. On the first day they are salted and stacked in one pit, on the next morning they are removed and restacked in a second pit, and on the third morning to a third pit. Each day the fish are shifted to allow the salt to permeate the tissues and any undissolved grains of salt are rubbed carefully into the slits. The brine that is formed in the first two pots is left undisturbed and used as a wash for the fish on the fourth day, the fish is well steeped in the brine, rubbed and polished with a pad of coconut fibre, rewashed in the same brine and sun-dried from 8 to 11 A.M. and left in the curing shed till evening when they are arranged in a pit. No brine is formed in the third pit. In some places as at Adirampatnam sun-drying is not practised but a supplementary cure is followed. The fish are washed well in strong brine specially made for the purpose, then sun-dried for about 4 hours, afterwards kept in the shade for an hour or more and finally carted away for sale. This supplementary curing is resorted to only when there is urgent demand for fish from merchants. In the case of small fish some are slit and the others are not. Slit fish are crammed with salt as in the case of large fish, and put into a pit where for two days they lie undisturbed. On the third day they are washed in the self formed brine and sun-dried between 8 to II A.M. and spread in the shed till evening when they are packed into bundles of mats of screw pine leaves. The unsilt fish are arranged in pits in alternate layers of fish and salt and a pot of brine of salt water from the river is poured into the pit. The fish are left overnight in this condition. taken out the next morning and sun-dried for two days.

```
      Proportion of salt—
      Large fish...
      ...
      ...
      ...
      1:5

      Small "...
      ...
      ...
      ...
      1:9 to 1:6

      Dryage—
      ...
      ...
      ...
      ...
      ...
      18 to 28 per cent.

      Small "...
      ...
      ...
      ...
      ...
      25 to 55
      "
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#### MALLIAPATNAM AND SETUBHAVACHATRAM.

The method of curing is rather peculiar to this locality. Large fish are slit open as usual and crammed with unpowdered salt. The gutting of fish is most perfunctory. The salted fish are taken to the curing shed and thrown into a pit dug for the occasion and as the floor of the pit is not protected with mat the fish lie on the sand at the bottom. When the pit is packed full it is covered with

a mat of palm or screw pine leaves and a layer of sand is heaped over it. Then a man stands up on the pit and stamps it all round briskly with his feet so that its contents are well squeezed in, and its top is completely flush with the adjacent ground. On the second day the fish is taken out and after rubbing in all undissolved salt placed in a second pit, well shuffled and covered up. The third and fourth days they are left undisturbed in the pit and on the fifth day taken out and weighed. Same process holds good for small fish also but the operation extends only for three days.

 Proportion of salt—

 Large fish ...
 ...
 ...
 ...
 I:5

 Small ,, ...
 ...
 ...
 ...
 I:9 to I:16

 Dryage—

 Small fish ...
 ...
 ...
 ...
 I2 to 35 per cent.

### PASIPATNAM, NAMBUTALAI, ATTANKARAI, RAMESWARAM, PERIATHORAI AND MUKKUR.

Pit curing is done both for big and small fish. Big fish are not dried either in shade or in the sun but small fish are dried in the sun after being removed from the yard. Fish are further cured outside the yard with duty-paid salt as the proportion of salt allowed in the yard is said to be insufficient.

Proportion of salt-

Big fish

Small ,,

Big fish Small " I:8 to I:6 ... Dryage-Small fish ... 20 to 30 per cent. VEMBAR AND SIPPIKULAM. Large fish ... pit curing. Small pot Proportion of salt-Big fish I:6 to I:4 ... Small " I:9 to I:6 • • • Dryage-

### PINNAKAYAL, ALANDALAI, OVARI, IDINTHAKARAI, KUTTAPULI AND KUTTANGULI.

• • •

...

٠.,

25 to 39 per cent.

40 to 55

Big fish are cut open, entrails removed, washed in sea water and after salt is applied to the cut surfaces are folded up. They are then rolled up in mats or placed one above another in small tubs. Small fish are roused with salt and after being kept for a short time are cleaned in sea water and dried in the sun. They are sometimes packed in pits also and sometimes sun-dried directly after salting without washing in sea water.

Proportion of	salt-					
Big fish	•••		•••	•••		I:6 to I:4
Small " Dryage—	•••	•••	•••	•••	•••	1:8 to 1:7
Big fish		•••	•••	•••		25 to 42 per cent.
Small "	•••	•••	•••	•••	• • • •	35 to 50

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STATEMENT showing the chief kinds

Telugu names of fish,	of Scientific or popular name.	bas igayat, Prayagi sad Ganjan.	Osopalpur and Mar. Kandi.	Sonnapur, Pattisonna- pur, Peddakarrivani- palem, Iskalapalem sand Baruva.	Battigalloru, Gedduru, Pundi, Manchinillu- peta, Alibada and Matriyada,	Коіћагечи.	Calingapalam, Kommaravanipeta and Pukkillapeta.	.seelevillA	Chintspalli and Muk- kam.
ε	(2)	(3)	(4)	(3)	(9)	(2)	<u>(S)</u>	6)	(10)
Bonthalu Budathavalu	Serranus formosus Immature Sciernoides and Otolithus,	Whole year.	: :	<b>:</b> :	::	All year round except July	Whole year. Apl. and May.	::	: :
Engallu Goparingalu Gorasalu	Pellona brachysoma Exocetus sp	Feb. to Apl	 Nov. to Mar.	1::	Mar. to May.	Dec Sept. to Jan.	Whole year. Do. Apl. and May.	 Jan. to Mar.	: <b>! !</b>
Gulivindalu	Upeneus Vittatus, Red	Dec. to June.	Do.	:	Jan. to Mar.	Dec	Whole year.	:	:
Jaggaralu	Pellona Megaloptera-	Dec. to Mar.	:	:	:	:	:	i	: '
Jellalu Kodipunjulu	Cat fish Pterois volitans	:::	Nov. to Mar.	111	Mar. to May.	:::	Whole year. Do.	:::	Jur.:
	Gar fish Bellona sp.	Mar. to Dec.	Ď.	;	:	Jan	Whole year,	:	:

Statement showing the chief kinds of fish brought to the yards, East Coast-cont.

Telagu names of fish.		Scientific or popular name.	has igs!srY , Tuqies! Jasinsty.	iopalpur and Mat- kandi.	onnapur, Patisonna- pur, Peddakarrivani- palem, Iskalapalem and Baruva.	strigalluru, Gedduru, Pandi, Alanchinillu- peta, Althada and Alanivada,	cothateru.	klingapatam, Kommaravanipeta and Pukkillapeta.	1) liva) 28.	Chintapalli and Muk- kan,	
Ξ		(2)	(3)	) <del>(</del>	(5)	(9) H	ı (î)	) (8)	, G	) <u>ê</u>	ı
Kanangaluthi	Scomber	r Microlepi-	Dec. to May.	:	:	Dec. to May.	:	:	:	July.	
Karalu	dotus (Macke Equula fasciata	douls (Mackerel). quula fasciata	Dec. to June.	Nov. to Mar.	:	Mar. to Junc.	Whole sear except July	:	Jan. to Mar.	•	
Kavallu	Cluper	6mbriata .	ţ	Oct. to Mar.	Oct. to	Oct. to Mar.	Oct. to Mar.	Oct. to Mar.		Jan.	\$
Konimulu	Seir fish	fish Cybium	Feb. to Apl.   Nov. to Feb.	Nov. to Feb.	Mar. Nov. to	Nov. to Feb.	:	:	:	Mar.	
Kurinthalu	Lutjanus sp.	atjanus sp	Whole year.	Nov. to Mar.	. eb.	Mar. to Oct.	:	Whole year.	:	:	
	Chatoessus	ressus	Whole year.	::	::	::	: :	S	::	: :	
Kayyangalu Magalu	Grey mullets	nullets balls (Mango	Do. Sept. 15th to	:	::	Jan. to May.	::	• •	Jan. to	:	
Moravalu	Dussum	Dussumieria	Nov. to Apl.	Nov. to Mar.	:	Do.	Oct. to Dec.	Nov. to Feb.	Mar.	:	
Nethili	Engraul	Engraulis Indicus	:	:	:	Do.	and mar.	Do.	Jan. to	Jan.	ţ
Pandumenu (Naimeen	or Lates (Begti).	calcarifer i).	Feb. to Mar.	:	:	;	:	:			
	Chanos (white	Salmoneus mullet).	July to Apl.	:	:	:	:	· •	:	:	

	9			and		_	,		
:	Jan. Mar.	: :	: : :	Aug.	Do.	:	:::	:	11.
and Whole year.	::	: :	:::	>	year. Summer.	Jan. to	:::	Whole	11.
	Whole year. Do.	Do.	Whole year.	Whole year.	pl. and May.	Whole year. Jan.	Nov. to Feb.	Do.	Whole year.
to Mar. to Oct. Mar. to May Apl.	pu	: :	· · · · · ·	Feb. to Mar. W	Jan. to May. Whole year Apl. except May. July		; ; ; ;	:	::
Mar, to Oct.		Mar. to Apl.	Jan. to May. Dec. to Mar.	Mar. to May. Feb. to Mar.	Jan. to May.	Do.	Dec. to Mar. Feb. to May.	Whole year.	::
	: <b>:</b>	: :	: ::	:	:	:	!!!	Whole	1:
Mar. to Oct.	Nov. to Mar. Do,	. F	 Nov to Mar.	Do,	:	:	Nov. to Mar. Nov. to Mar.	Whole year	Nov. to Mar.
Feb. to mid. June.	Jan. to May. Nov. to Mar. Do,	: :	Apl. Nov. to Feb. Feb. to mid.	Feb. to Apl.	:	:	 Nov. to Apl.	Feb. to Apl.	· : :
Stromateus, Pomfrets. Feb. to mid. Mar. to Oct. Mar.	ulis Porava or tarius delicatu-	lus. upea ilisha (Hilsa) Sable fish. iagramma crassis-	Sillago sihama	Lactarius delicatulus   Feb. to Apl.	richiurus haumela (Ribbon fish).	Myliobatides skates	Gerres filamentosus Nov. to Mar. Trichiurus haumela or Nov. to Apl. Nov. to Mar.	Cybium interruptum   Feb. 10 Apl.   Whole year	Harpodon nehoreus Pristis sp
<u></u>	: <b>:</b>	: :			Tric	:	છ ≔	<u></u>	#4
Chanduvalu	Paralu Poravalu	Pulasalu Poosaparigalu	Ratti golarlu Sooragalu Sorralu	Sudumaia	Savallu	Thirikai	Udavalu Vodagalu Valavalu	Vanjaralu	Vanamottalu Yalavalu

	Thaticheilapalem, Mypaud, Kodur, Nalattur, Kotta- patam, Kondur- palem and Mona- palem.	(12)	:	:	Jen. to Mar.	:	:	June to Aug.	i	:	:	i	:
-cont.	Corings, Mogslturm, Missmpstsm, Lanks- vanidibbs, Koths- pstem and Chaki- cherts.	(16)	3	:	Winter and summer	(Jan. to Mar).	:	Winter and	summer.		:	:	:
ds, East Coast	Kajiahpeta, Penta. kota, Konapapa. peta, Uppada and Godarigunta.	(15)	Whole year	Summer and	winter.	Feb. to Apl	Jan. to AFl	Feb. to Nov Winter	Three months after rains	set in. Jan. to Apl.	Jan	ï	Jan. and Feb.
t to the yard	isljeripeis, i'udi- sadska snd Pols- marsv	(14)	Apl. to Sept.	:	:	Apl. to Sept.	Do.	Do.	:	:	•	Apl. to Sept.	Do.
fish brough	bas merugspursm. Geograpism.	(13)	:	Mar. to		:	;	:	;	:	Mar. to May.	:	Nov. to Feb.
kinds of	Lawson's Bay.	(12)	i	:	:	May to	; ;	:	:	:	:	:	Apl. to May.
g the chief	Magamayyapalem, Bimlipatam, Koltueri and Montgomeri peta.	(11)	:	i	:	June	:	June	:	:	July	i	fimbriata Jan. to Mar.
Statement showing the chief kinds of fish brought to the yards, East Coast-cont.	Scientific or popular name.		Serranus	Pellona brachysoma	Gilt head (Pristi-	Scienids	Upeneus Vittatus, Red	Cat fish	;	Gar fish Bellona sp.	Scomber microlepido	Equula fasciata	Clupea fimbriata (Sardines).
	Telugu names of fish.		Bonthalu	Engallu	Gorakalu	Gorasalu	Gulivindalu	Jellalu	Kilavalu	Kadullu	Kanangaluthi	Kāralu	Karallu

:	:	<u>:</u>	:	Not given.	:	Not given.	Apl. to July,	;	:	June to Aug	July and Aug	:	:
	and	and	18r.).		:		:	:	sum- to	-			
:	Winter	Winter Summer.	(Jan. to Mar.).	:	Oct. to Dec.	:	Whole year	Do.	Winter and mer (Jan. Mar.).	:	:	:	
Ď.	`:	Jan. to Apl Winter	Summer and	:	:	:	:	:	<b>:</b> ,	Feb. to Nov.	Summer and	Three months after rains.	:
Jan. and Feb.	:	Whole year.	Apl. to Sept. Summer	:	:	:	Nov. and	 	•	Apl. to Sept. Feb. to Nov.	;	:	Feb. to Sept.
:	i	;	;	;	;	:	:	:	;	;	:	;	:
:	;	:	;	:	:	:	i	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	<b>:</b>	:	:	Jan. to Mar.	:
Seir fish Cybium	Grey mullets	Roe balls (Mangor fish).	Dussumieria	Platyglossus nigres-		Cybium Commersonii.	Engraulis Indicus	Clupea ilisha (Hilsa).	Lates calcarifer (Begi or Cock-up).	Stromateus, Pomfrets.	Сагапх	Engraulis Porava or Jan. to Mar.	Us. Clupea ilisha (Hilsa) Sable fish.
:	:	:	:	:	:	:	:	:	Nai-	:	:	:	:
Konimulu	Kayyangalu	Magalu	Moravalu	Moyya	Meva	Mowlasi	Nettili	Oollan	Pandumenu (Nai- Lates meen). (Beg	Chanduvalu	Paralu	Poravalu	Pulasalu

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Thatichetlapalem, Mypaud, Kodur, Melattur, Kotha-patem, Kondur-palem, and Mona-palem.	(12)	i	:	;	Whole year.	June to Aug.	;	:	;
Corings, Mogalturu, Nizampatam, Lanka vanidibba, Kotha- palem and Chaki- cherla.	(16)	:	:	:	į	:	Winter and summer.	:	Whole year
Kajiahpeta, Penta- kota, Konapapa- peta, Uppada and Godarigunta,	(15)	Jan. to Apl	Whole year	Summer and	winter. Jan. to Apl	:	Summer and winter.	Apl. to Sept. Jan. and Feb.	i
Jallaripeta, Pudi- madaka and Pola- varam.	(14)	:	Whole year,	:	Apl, to Sept.	÷	Jan. and Feb.	Apl. to Sept.	;
bas merugsperird Gangsverem Gangsverem	(13)	:	;	Mar. to May.	Do	:	;	:	:
Lawson's Bay.	(12)	:	:	:	May to Oct.	:	:	:	:
Magamayyapalem, Bimilpatam, Kothuri and Montgomeri- peta.	(11)	:	:	Aug. and	Sept.	:	:	:	:
Scientific or popular name.		Diagramma crassis- pinum.	Sillago sihama	Lac arius delicatulus.	Trichiurus haumela (Ribbon fish).	Myliobatides; skates.	Trichiurus	Cybium interruptum.	:
Telugu names of fish.		Pootaparigalu Diag	Soorangalu Silla	Sudumulu	Savallu	Thirikai	Valavalu	Vanjaralu	Yengilayilu

Statement showing the chief kinds of fish brought to the yards East, Coast -- cont.

Overi, Idintha karai, Kuttapul and Kuttangul	(8)	:	•	.:	:	: :	: :	Apl. to May.		i	Jan. to Feb.		:	: :		: :	July to Nov.	1 :		•	: :
Attankarai, Rames, warram, Periathorai, Muklur, Vembar, Sippikulam, Pinna. kayal and Alandalai,	(1)		Aug. to Jan		٠	lan. to Feb.		* Jan. to Mar. and Apl. to May.	in Jan	:	May to Nov.	* Shoals in Sept.	:	: :		::	Aug. to Feli	: :		Feb. to Mar.	feb. to Sept jan. to Oct
Vadakamna- patnam, Pasipatnam and Nambuthalai.	(9)	:	Feb. to Mar.	:	:	whole year	Do	:		;	:		: :	and Whole year	ć	Sep		: 1		:	Whole year   Jan. to Oct.
Akkaraikuppam, Arcotthorai, Mutiu pet, Point Calimere, Adirampanam, Malliapatam and Seubavachatram.	(5)	į	Jan. to Mar. and	Aug. 10 Sept.	: ;	Jan. to Mar Do	:	:		:	•		: :		Aug. to Sept.	July to Sept				:	: :
Kadappakkam, Nillai, Neidawsai, Vanagiri and Tranquebar,	(S)	Whole year	Do	All year round.	:	July to Sept	:	:		Jan. to June	All year round.	Whole year	All year round.	:		: ;	Tuly to Sent			:	Whole year .
Fuliyancherrikuppam, Irukam, Bhima- lavaripalem, Medical- kuppam, Mangodu, Pulicat and Sattankuppam.	(3)	:	:		Whole year	Jam to Septe	:	:		microlepidotus June to Oct Jan. to June	Whole year All year round.	:	All year round. All year round.	:	:	: :	Ian. to Oct	Oct to Dec		:	June to Oct Whole year
Scientific or popular name.	(2)	Gndgeon	Scirena albida · (Drum		D-1	Lates calcarifer (Cock up).	Chorinemus sanctipetri	Chatcessus sp		Scomber microlepidotus	ata	Grev mullets	:	seenghala	Caros	Chatcessus (chacunda)	Lactarius delicatulus	Chatcessus nasus or cha	canda.		<b>:</b> :
Tamil names of fish.	(1)	Uluvai	Katthalai	Kakkan	Kallan Talai	Koduva	Katra	halar		Kanangaluthi.	Karal	Kavyangalu		Do.	Kendai		Madayai	ndai	M1	Nagarai	

\* Shoaling season.

Statement showing the chief kinds of fish brought to the yards, East Coast-cont.

Tamil names of fish.	Scientific or popular name.	Puiiyancherri. Kuppam, Irukam, Bhima- Iavaripalem, Medical- Kuppam, Mangodu, Puicat and	Kadanpakkam, Killai, Neidavasal, Vanagiri and Tranquelar.	Akkaraikuppam, Arcotthorai, Muthu- pet, Point Calimere, Adricampatann, Malliapatam and Setubavachatram.	Vadakamma- patnam, Pasipatnam and Nambuthalar.	Attankarai, Rames- waran, Periathorai, Mukkur, Vembar, Sippikulam, Irima- kayal and Alandalai.	Overi, Idintha- karai, Kuttapuli and Kuttanguli.
(I)	(2)	Sattankuppam, (3)	(4)	(5)	(9)	(2)	(8)
Раппа	Oplithus ruber; Sciena aneus; Polyacanthus cu-	38	;	1	į	Aug. to Mar	Jan.
Poruva	ପ୍ର	:	Whole year	:	:	:	:
Pokkan Sura Seela Soodai	Shark	Nov. to Dec.	July to Sept. Do.	Jan. to Mar	Whole year	Whole year Mar. to Oct Mar. to May and Sept. to Dec.	June to Nov.
Savalai Sudumbu Thirukkai	Ribbon fish Lactarius delicatulus Myliobalides ; skales	Jan. to May	All year round. July to Sept.	Mar. to Apl. and Aur. to Seut.	and Whole year	Aug. to Dec May to Oct	Whole year.
Thellapodi Tholi Thondai Thed	Dussumieria sp. Cat fish Gobius sp.; Sauri	Oct. to Dec		July to Sept,	   Whole year	Whole year Mar. to Oct	Jan. and Feb. Jan. to Sept.
Vela	Saw fish (Pristis cuspidatus).		;	:	į	Sept. to Dec	:
Velra Valai	00	Nov. and Dec.	Oct. to Nov.	: :	Whole year	Mar. to Dec.	::
Vaval	Fomfret	June to Oct	Whole year	Mar. to May and	and Jan. to Mar.	Whole year	June to Nov.
Vavval Vanjaram	Stromateus Cybium interruptum	June to Dec	Whole year		<b>:</b> :	June to Dec	::
		-	# Clearling age	-			

\* Shoaling season.

#### SECTION V.

#### ECONOMIC CONDITION OF FISHERFOLK AND CURERS.

#### EAST COAST.

#### KASIPUR.

Fishermen as a class cannot be called wealthy, and possess very little money, land or other property, but by industry in their pursuits which comprise fishing, manufacture of nets and the necessary cordage, boat building and the construction of rafts, they earn enough to provide for their few needs with a small saving to the credit of a working capital, so that jointly or severally they are able gradually to carry on business independently of capitalists or middlemen. The community carefully watches over its interests, zealously guarding against any intrusion by the sowcar who is thus effectually excluded. Fishermen are remarkable for their fraternity, and this feeling of fellowship is due to combination in a common cause, coupled with every day participation in the dangers connected with the fishing industry. The controlling of boats is merely the reservation of the fish by the boats concerned in view to its sale to persons who have agreed to buy up, for ready cash, all the fish caught within a fixed period and who have paid a sum of money in advance. In this sense 26 of the ticket-holders control boats at Pottra. As the catches of these boats are landed the price is fixed and cash payment made, in full or in part, and in the latter case, the balance is adjusted from the advance made, provided always that the whole advance is not appropriated before the expiry of the stipulated period. Some of the curers also purchase fish at Nungaleeswara for ready cash. Hired labour both for the transport of fish from Pottra to the yard and also to assist in actual fishing operations is usually engaged. Labour though paid in cash is variable. Fishermen hired to make up a fishing party receive as their wages a share of the fish caught; the owner of the boat taking a double share for himself and a single share for each member of his family forming the party. In the case of controlled boats these shares are sold to the persons who have contracted to buy them. Fishermen as a rule make their own nets.

#### PRAYAGI.

The ticket-holders with the single exception of a Kevuta, are Jalaris of Prayagi, Korlabadi, Ramalanka and Baliapuram. The Kevuta is a merchant supplying the Konchoor market with cured fish. He buys raw fish, cures it at the yard and takes it to the market but does not engage himself in fishing. Seven ticket-holders in addition to the fish they catch in conjunction with others obtain fish from other fishermen under a system of contract. The fishermen who are not ticket-holders sell the fish they catch in the local market or to the ticket-holders under contract. Curing at

the yard is done by ticket-holders assisted by the female members of their family. There are no capitalists concerned with the business of the yard but the ticket-holders stipulate with the fishermen th at all the catches in a year are made over to them and they pay a sum of money in advance as an earnest of the arrangement. As the catches are brought in, they are valued and payment is made in cash either in full or in part in which latter case the balance due is adjusted towards the advance payment, but the whole advance is not appropriated before the expiry of the contract. Fishing is mostly carried on in the Chilka lake and in the whole neighbourhood there is only a single Peruvala which is used in the sea. They say that fish is very scarce in the Chilka lake and it seems that some years ago some Europeans who came to organize a fishery found that it was not a paying concern and went away.

#### GANJAM.

The ticket-holders are either Vadas or Kevutas. The latter are said to be connected with the Kaibartas of Bengal and in addition to fishing in fresh waters are engaged in the carrying trade and some are also petty traders. The Vadas or Vada Balijas as they call themselves are the real sea fishermen and seem to be a section of the Palles. They have a caste panchayat consisting of the headmen called "Kularaju and Pilla" who settle all matters relating to their caste. They fish in the sea and some of them also are ticket-holders but their condition is the same as that of other fishermen on the coast. They worship a large number of gods and goddesses as well as their deceased ancestors. These are represented in wooden or clay figures of various shape and size, one of them being the figure of a "Bengali Babu wearing a hat and riding on a black horse." They make offerings of goats, pigs, fowls, flowers, arrack, toddy, etc., to these gods and goddesses before using a new boat or net, before fishing expeditions are undertaken, when good catches of fish are landed, or when there is fear of any epidemic or other disease. Much money is spent in this way and all fishing is stopped for days on such occasions. They are a very superstitious people, very ignorant and intemperate. There are very few literates among them, and living as they do in out-of-the-way fishing hamlets not easily accessible they lead a very isolated life.

#### GOPALPUR.

The fishermen are Vadas and Jalaris who fish in the sea and engage themselves in the landing and shipping business of the port. When Gopalpur was a flourishing seaport these were in affluent circumstances but now they earn very little. Some of them emigrate to Burma to serve as coolies in the cargo boats there. Their females also are engaged as coolies in merchants' godowns. The ticket-holders belong to the Kandra caste who do not go for seafishing but purchase fish from the other fishermen and cure them or sell them as fresh in the neighbouring villages. The number of fishermen and others in this locality who are connected with the fishing industry may be about 5,000, but they are all very poor. They are no capitalists or middlemen but some of the Kandra ticket-holders advance money to fishermen for repair of their boats

and nets, etc., without charging any interest, but receive their fish at cheaper rates, i.e., all the small fish caught in the Pedda vala should be given at half rate or As. 4 per basket and the large fish at varying rates. The fishermen are at liberty to sell the fish caught in other kinds of nets to anybody they like. The price of fish is settled by themselves or by a middleman who receives a fee in kind. The fishermen who own a Pedda vala give petty sums of money to the "ryots" or labourer fishermen who work their boat and net to secure their services. This is a standing debt, and so long as it is unpaid the "ryot" is obliged to work under the man who has given the money The fishermen borrow money from sowcars also, at 25 per cent per annum, but in the case of loans granted to people who emigrate to Burma the rate is doubled. The ticket-holders themselves do all the curing work and no hired labour is employed except for transporting fish when they are landed at some distance from the yard, and for this they employ their own relatives. The Kandras carry on fishing in the backwaters and may also serve as coolies. They are comparatively better off than Vadas and Jalaris; several of them are literates, and a number of their children go to school, but drinking is common among men and children as elsewhere. The Jalaris like the Vadas are Telugu fishermen but some of them also carry on cultivation in Ganjām and Vizagapatani. They very much resemble the Vadas in their habits and manners and also worship a number of gods and goddesses in the same manner.

#### MARKANDI.

Some of the ticket-holders are professional fishermen and belong to the Jalari or Vada caste. Others are Kandras—a class of Uriya fishermen who do not catch but purchase fish from fishermen. The fishermen are poor and are assisted in their industry by the Kandras who advance sums varying from Rs. 100 to Rs. 150 to them according to the size of their net, and in return the fishermen have to sell their fish to Kandras at the rate of three baskets, each of 20 seers, per rupee. Most of the curers and fishermen live in Markandi but a few live in the adjoining villages. The curers generally hire labour at As. 12 per day per head whenever there are large catches. Otherwise gutting and cleaning is done by themselves, sometimes assisted by their relatives.

#### SONNAPUR.

The curers one and all are in easy circumstances though not very wealthy. They deal directly with fishermen and manage their concerns. The Kevutas who deal in fish advance money to fishermen on the security of their boats and nets and get in return all the fish caught by them at a certain fixed rate. Hired labour is not generally engaged in the yard. The curers do all the work themselves.

#### PATTI SONNAPUR.

The fishermen are as a class poor, while the Kandra curers are in comparatively easy circumstances but by no means wealthy. They may be considered the middlemen here and may possess between Rs. 500 to Rs. 1,000 as capital. The fishermen borrow money from them on condition that they sell all their catches except big fish to them at the rate of three baskets of 20 seers per rupee. Hired labour is seldom employed here except on days of heavy catches when coolies are taken at As. 2 to 6 per adult man. Of the ticket-holders some are real fishermen and some are Uriya Kandras.

#### PEDDAKARIVANIPALEM.

The curers all belong to the fisher community who are poor and have no capital of their own. They borrow from Kevutas on the security of their boats and nets and on the understanding that they give them a certain portion of fish caught every day. If the loan is a small one, they pay it back within a month or two by sale of fish to them at a cheap rate. There are no capitalists or middlemen. No hired labour is employed either for fishing or for curing except on days of heavy catches when coolies are employed and paid a part of the catch of fish. Dried fish is carried to markets in kāwadies by men and in baskets by women. Men are paid 5 to 6 annas and women 3 to 5 annas per day. Men carry 2 maunds and women 1½ maund.

#### ISKALAPALEM.

All the curers are of limited means. They are not however financed by the capitalists or middlemen but four or five always join together and carry on the business. They are Jalaris and Vadas by caste. No hired labour is used in the yard. They help one another in hauling nets, in curing, etc.

#### BARUVA.

Sea fishing is carried on by Jalaris and Vadas and they also cure the fish caught by them. They build their own boats and make nets. They seem to be much better off than their brethren on the coast in their means, manners and mode of living. being an important port these people are also employed in the shipping and landing work, and as it has direct communication with Burma a number of these people emigrate and engage in the fishing and shipping trade at Rangoon. They borrow money at times from sowcars on the security of jewels, etc., at the ordinary rate of interest, but are independent as regards the sale of their catches with which the money-lender has nothing to do. As there is a good demand for fresh fish in the neighbourhood most of their catches are sold for ready cash on the beach. Pallees are the traders in dried fish which they purchase from the curers. There is a middleman called Pillai whose duty it is to weigh such fish and is paid three pies for every rupee worth of fish sold. He is provided with scales and necessary weights. Dried fish is also exported to Burma. The curing is carried on by women folk and no hired labour is employed. There are about 20 big nets (Peruvala) and a number of other kinds of nets, boats and catamarans, and the village is in a flourishing condition. There are very few literates among the people but they are comparatively intelligent and expressed a desire to have special schools for their boys which they could attend in the evening after the day's work is over.

#### BATTIGALLURU AND GEDDURU.

Except six or seven curers who may be said to be in easy circumstances, the rest are generally poor and live by fishing and are not financed by capitalists or middlemen. No hired labour is employed. They help one another and are assisted sometimes by their women and children. All the ticket-holders are fishermen by caste.

#### PUNDI.

Most of the curers are Kevutas and some are Jalaris. The fishermen and curers are of ordinary means and are not financed by capitalists or middlemen. The fishermen are given advances of Rs. 2 to 5 per boat by the ticket-holders and get in return all the fish at current rates. Certain men arrange the prices between the fishermen and purchasers and these get a commission of six pies in the rupee. Hired labour is occasionally employed, but no permanent coolies are kept on. When fish are caught in large quantities carts are engaged to transport them to the yard at I to  $\frac{11}{2}$  anna per mile and female coolies are paid  $\frac{11}{2}$  to  $\frac{11}{2}$  anna per head-load.

#### MANCHINEELLUPETA.

The curers are the wives and female relations of the fishermen who are Vadas and Jalaris by caste. They are in fairly well-to-do circumstances and not financed by capitalists. No hired labour is employed.

#### ALTHADA.

The fishermen are in well-to-do circumstances because they do not depend entirely on fishing but sometimes go to Rangoon to earn their livelihood when they find that the local season is unfavourable. They remain there for a year or two working in boats on monthly wages of Rs. 15 to 20, and return home with savings. They are not financed by capitalists or middlemen. No hired labour is employed except on days of heavy catches and also when the fish are landed at a distance of 6 or 7 miles when they engage female coolies and carts for conveying fish to the yard. Sometimes coolies are employed for gutting and cleaning and are remunerated by 3 or 4 handfuls of fish.

#### MARRIVADA.

The fishermen are in well-to-do circumstances because in addition to fishing some of them also possess landed property from which they derive an income. They also go to Rangoon and return with fair savings and resemble in every respect the fishermen of Althada. The curers are Jalaris and Vadas.

#### GUPPIDIPETA.

The curers and fishermen are not badly off though there are no rich men among them. They are Vadas and Jalaris by caste. The fishermen that own boats and nets hire others for fishing operations. These hired men are not permanent coolies and do not receive monthly wages nor are they paid in cash. The fish caught is divided into an equal number of shares, each boat and net coming in

for separate share. Thus the owner of the net and boat always gets three shares and the rest one share each. In the case of large boats, the fish caught is divided into three equal shares, one of which goes to the owner of the boat and net and the other two are equally divided among the men who worked them.

#### KOTTAREVU.

The ticket-holders are women of Vada Balajees (Vadas) caste known as Vādakulam. They do not live by fishing only as most of the males of the ticket-holders own fields and cultivated paddy and also very frequently go to Rangoon to earn. It is only those who remain in the village that do the fishing work. Some of the fishermen and curers are poor and live from hand to mouth. They engage themselves as coolies and help the owners of nets and boats. Other conditions are same as those of Guppidipeta.

#### CALINGAPATAM, KOMARAVANIPETA AND KURREMPALLI.

The fishing castes are Vada Balajees and Jalaris but most of the fishermen are Vada Balajees. The houses of fishermen are built on the sea-shore. Most of the fishermen are poor and live entirely on fishing. The fishermen do not take advances from merchants. The trade is obviously too small to attract capitalists or middlemen. Hired labour is employed on days of heavy catches.

#### PUKKILLAPETA.

The fishing hamlet is situated at the mouth of the Lan gulia river near the old fort of the Mussaffer Bunder and is inhabited entirely by Vadas. Their huts are of the usual type but built in rows and sanitation is very much neglected. Fishing is mostly carried on in the sea. The right of fishing in the adjoining river is leased by a sowcar who in his turn collects a lump sum jointly subscribed by the fishermen of the locality. They are poor and entirely depend on fishing for their livelihood but some of the younger men go to Rangoon for work. They do not take any advances from merchants but sell their catches for ready cash on the beach and there is a good demand for fresh fish from Chicacole. Fish is taken for curing only when it is very cheap or when the catches are landed too late to be sent to Chicacole and other markets. The ticket-holders do not own boats and nets but buy the fish from fishermen.

Iraguvala and Maravala are the nets mostly used in the sea. Iraguvala requires four men to ply it and the catches are divided into five shares—one of which goes to the owner of the net and the rest to the four men. The Maravala of this locality is different from those seen at Ennore and other places in the south being without the fixed engine called Kambi, and two nets are operated conjointly each requiring four men. The catches are divided into ten shares of which two go to the nets and the rest to the men.

#### ALLIVALASA, CHINTAPALLI, MUKKAM AND NAGAMAYYAPALEM.

The fishermen are Vada Balajees. A few of them are of ordinary means and the rest are poor. They find their own capital to buy boats and nets to conduct the industry. The owner of a big boat

engages a number of share-holders who go to sea for fishing jointly and catch fish which are divided equally among the share-holders setting aside a share for the net and boat. No coolies are engaged for curing work which is done by their females.

#### BIMLIPATAM, KOTHURU AND MONTGOMERIPETA.

The fishermen are Vada Balajees and Jalaris and are generally poor. Most of the younger men emigrate to Rangoon every year. No middlemen or capitalists are engaged in the business. They cannot afford to conduct business on a large scale but two or three join together and carry it on in a small way. One of them buys raw fish, another attends to the curing of it, and a third to the disposal of the same in the markets, and the profits are divided among them. No hired labour is employed.

#### LAWSON'S BAY.

The fishing village, consisting of nearly 300 huts with a population of about 1,500, is situated in the northern borders of the Vizagapatam Municipality. The huts are circular, made of mud walls and palmyra thatch, and congregated in the most irregular manner with hardly any space between them. The village is surrounded and overgrown with prickly-pear, and when fire breaks out, as it often does, owing to the close proximity of the huts, the people find it very difficult to get out of danger. Speaking about the desirability of sending their children to school one of the fishermen said that they would be more grateful to the authorities if measures are taken to clear the village site of the prickly-pear than if they opened a school there. The sanitary condition is also very defective and the people not being cleanly are carcless of their dirty surroundings. They are generally poor but it appears that they were much better off before the introduction of the salt tax when they utilized salt-earth for curing fish; even now they believe that fish cured with salt-earth is more tasty and can be kept for a longer period than fish cured with ordinary salt. Vadas and Jalaris are the people who carry on sea fishing in this neighbourhood and Vadiloo are traders in fresh fish who buy fish on the beach and carry it for sale to markets in the interior. The ticketholders are mostly females and no hired labour is employed. Fishermen though poor do not borrow money for their business. They are a hard-working people and earn a decent income but owing to their intemperate habits are always poverty-stricken. Some of the able-bodied men emigrate to Burma.

#### SRIRANGAPURAM.

This village is situated within the limits of the Vizagapatam Municipality and contains about 600 huts with a population of nearly 3,000 souls. The huts though made of mud walls and thatch are built in rows with some space between the rows forming narrow passages. Vadas and Jalaris are the people who engage in sea fishing, and in addition to fishing a large number of them are also engaged in the landing and shipping business of the port and their females serve as ordinary coolies and make coir from coconut

fibre, which industry can be considerably improved under proper guidance. Some of their men also emigrate to Rangoon where they engage in fishing or as lascars and boatmen. They earn enough to maintain themselves by these various means but intemperance and illiteracy have hitherto prevented them from learning thrifty habits with the result that most of them are always in a poverty-stricken state. There is a Municipal elementary school just in front of this village but not more than half a dozen fisher boys attend it. They have a caste panchayat under a nominated headman called Kappu who settles all disputes. The boats and catamarans are built by the Jalari carpenters who have made it a special profession. Besides Jalaris and Vadas there is a caste called Voddas who do not fish in the sea but only trade in fish. They live near the backwaters adjoining Dolphin's Bay and are more cleanly and better off than the Jalaris and Vadas. The curing operations are carried on by females, and no hired labour is employed.

#### GANGAVARAM.

Fishermen and curers are generally poor and depend solely on their profession for livelihood. There are no capitalists or middlemen to finance them. The ticket-holders are Jalaris and Vada Balajees. Hired labour is not employed.

#### JALLARIPETA.

The fishermen and curers are Jalaris and Vadas and they live near the sea-shore. There are about 300 houses in all with a population of nearly 1,500. They are generally poor and are not financed by capitalists or middlemen but they work independently. No hired labour is employed but the females do the curing work and the males go out for fishing.

#### PUDIMADAKA.

The ticket-holders and fishermen belong to the fisher castes. They are men of moderate circumstances, they are not financed by any capitalists or middlemen. Some of the ticket-holders have their own boats and nets. Hired labour is not employed. The boats are built by the fishermen themselves.

#### POLAVARAM.

The fishermen are generally poor and there are about 400 houses in this neighbourhood. They borrow money from the capitalists and middlemen at very high rates of interest. The fishermen are Jalaris and Vadas by caste. Hired labour is not generally employed. But the owner of a Peddavala engages from 10 to 20 men who are considered as permanent coolies to work his boat and net. Fish caught is divided equally among themselves. If any of the permanent coolies is prevented from going out to fish through illness, etc., he is not deprived of his share. The boats are built by the fishermen themselves under the supervision of a man who is acquainted with boat-building and who is given one rupee and free meals for the days during which the boats are being built.

#### PENTAKOTA.

The fishermen and curers are generally poor with the exception of one or two who are a little better off. The curers and fishermen belong to the castes of Pallees and Vadas. The net owners borrow money at an interest of 2 to 3 per cent per month. Each net owner engages a number of hired labourers and advances Rs. 20 to each man to work under him but no interest is charged on such advances. The fish caught is divided into three shares, one of which is set apart for the net and the other two are divided equally among all the men engaged in operating the net.

#### RAHAHPETA.

The fishermen are generally poor and borrow money from middlemen at high rates of interest ranging from 2 to  $2\frac{1}{2}$  per cent per month. There are about 800 houses in all. Generally the fishermen are Jalaris and Vadas by caste but there are also some Pallees. Labour is hired only by the owner of a Peddavala who pays them not in cash but in kind, the quantity of fish caught being divided equally among them after setting aside a third of the catches for the net owner. The boats are built by the fishermen themselves.

#### KONAPAPAPETA.

The fishermen and curers are mostly poor and worse off pecuniarily than those at Uppada. Curers are all Vadas (not fishermen by birth who are known as Jalaris but fishermen by occupation). All the curers are females who are mostly relatives either close or distant of the men who own boats and nets. are financed by capitalists or middlemen. The fish is sold in lots. Two or more curers club together and purchase a lot and one of them makes herself responsible to the head fisherman for due payment. One month's credit is usually allowed and when times are hard even two months are allowed. In the case of fishermen it is somewhat different. As an Alivi boat with its net and full complement of ropes, etc., is very expensive, costing more than Rs. 1,000, some thirty fishermen enter into joint partnership and one among them is selected as headman. He then goes to various money-lending persons and obtains from them sums ranging from Rs. 25 to 200 till the requisite sum of money is collected for preparing the net and boat. Something like Rs. 200 to 250 is spent in drinking bouts while the nets and boat are under construction. The money is usually borrowed at 2 per cent per mensem. As a rule it is said the whole amount is generally paid up within a year if the season is good. Money is lent out by the money-lenders to the fishermen merely on personal security. An Alivi net owner engages above 40 coolies and pays them at annas 2 per head per haul. When the catches are heavy labourers are employed for carrying and gutting fish outside the yard, and are paid at six pies to one anna per head, and in addition a handful or two of fish is given.

#### UPPADA.

This is an important fishing village in the Godavari district inhabited by a large number of Vadas. The village is about two

furlongs from the main road and is easily accessible. Owing to the erosion by the sea a portion of the village site is already under water and more of it is being carried away. These people are well off and a number of them have some property. Their houses are more commodious, better built, and kept cleaner than those of other villages on the coast. They have a caste headman called Kula Pedda whose office is hereditary and who with the help of the elders of the caste forms the panchayat to settle all matters under dispute. He is paid a fee on occasions of ceremonies. women folk are better clad and wear gold and silver ornaments of some value. The people look healthy and well fed. They are illiterate but, comparatively speaking, not very much addicted to drink. In addition to fishing and curing both males and females are engaged in other kinds of cooly work and a number of the able-bodied men also emigrate to Rangoon where they serve as lascars in boats. The ticket-holders who are 72 in number are all females of the Vada caste. Some of them advance money to the owners of boats and nets to secure their catches but it is not obligatory on their part to buy all the fish brought by the fisher-The fish is brought to the beach in net bags and the ticketholders offer what they think is the proper price, but under a system called "Manu" the fishermen are paid only 75 per cent of the price so offered and accepted. Curing is carried on by females and no hired labour is employed. They themselves carry the cured fish for sale to distant places such as Dhowleshwaram, etc., and are well acquainted with the details of despatching goods by train and other matters relating to their business. The sea fishing is conducted by means of various kinds of nets but the Alivi net is peculiar to this and a few other villages in the neighbourhood. is a shore seine net about 200 fathoms long and of varying depths, like the Rampani of the South Canara coast, but smaller in size and less expensive, costing about Rs. 1,500. It is made up of a number of pieces of wall net laced together and requires one boat and 50 to 60 men to operate it. There are about 12 Alivi nets in this village alone. Each net is owned jointly by a group of fishermen; the headman of the group contributes the three central pieces of the net which are costly being much larger and stronger made than the other pieces, as well as the boat, rope, and other tackle; each of the other men contributes the side pieces of equal The sale proceeds are divided and the headman gets ten times the share of each of the other individuals. In addition to the men who own the net a number of coolies are also engaged to operate the net and they are paid wages from 2 to 6 annas varying according to the value of fish caught and the owners divide only what remains after these coolies are paid. The coolies are paid daily but the owners divide their share only at the end of the fishing season, and in the meantime their account of the daily catches and expenses is maintained by a Kometi of the place, they being illiterate. The boat used for operating the Alivi net and tackle is built up like the Masula boats with no ribs, is about 37 feet long, 7½ feet wide and 3 feet deep, and is provided with heavy wooden oars each requiring four or five men to work it. The money required for making an Alivi net and tackle is sometimes raised by loans from sowcars on the security of jewels and other property

at 9 to 12 per cent interest and is paid off in instalments. Some Reddikees who carry on business in dried fish also advance money to the ticket holders but no interest is charged and no concession in price is given. There is much demand for fresh fish from Pithapuram and other towns in the neighbourhood where it is carried on kavadies by men runners. Kothapalem is a fishing hamlet near Uppada inhabited by Pallees and a few Vada families. They are much poorer than the Vada fishermen of Uppada and do not own any Alivi or other big nets and boats.

#### GODARIGUNTA.

This village is situated a few miles north of Cocanada town and contains about 100 huts inhabited by Vadas and a few Pallees. The huts made of mud wall and thatched are of the usual round type and built in a most irregular manner leaving hardly any room between each hut. The sanitary conditions are very defective as the people do the gutting and cleaning of the fish at their doors and all the offal is thrown on the adjoining land where they rot and pollute the atmosphere of the whole place with a very bad stench. The fishermen scem to be in affluent circumstances owning large Alivi and other nets, and their women folk wear gold and silver ornaments with decent clothing. Some of the younger men emigrate to Rangoon but their women are not allowed to work as ordinary coolies. There are hardly any literates among them and they are utterly ignorant of the benefits of education. Drinking is prevalent. The fish caught by the men are taken by the elderly women to Cocanada and neighbouring places to be sold as fresh fish, or they are gutted and cured by them in their own premises with bazaar salt. The local fish-curing yard has been closed owing to decrease in the operations which was due to the fact that the fish caught by the other villagers in the vicinity and which used to be brought here for curing in former years, are now disposed of in the fresh condition owing to an increased demand for fresh fish. The closing of the yard is a great hardship to the curers of this village especially as they have at times to cure large quantities of Vanamattalu (harpoden nehereus = Bombay duck) which are caught in the Alivi nets and which can hardly be sold as fresh owing to the large quantity of moisture present in its flesh and which makes it unsuitable for cooking. They do not prepare this fish as they do on the Bombay coast by simply sun-drying them, as it is usually caught during the rainy season. The Pallees of the village are much poorer than the Vadas and own no Alivi nets. Curing is conducted by the women and no regular hired labour is employed.

#### MOGULLAPETA (COCANADA).

This is a fishing hamlet situated on the eastern side of the canal opposite the Cocanada harbour and contains about 200 huts inhabited mostly by fishermen of the Pallee caste and some Vadas and Jalaris. The village site belongs to the Raja and being outside the Municipal limits there is no arrangement for the sanitary upkeep of the place. The fisher-folk dry all their fish including large quantities of prawns on the ground adjoining their huts and as all the offal is thrown about the place there is a very

bad stench which is carried to a very great distance over the town; it is a wonder how the Municipality tolerates this nuisance. There is no fish-curing yard in this neighbourhood as most of the fish is sold as fresh to meet the local demand and the rest cured with bazaar salt. Large quantities of Vanamattalu (Bombay duck) as well as prawns are caught here. The people are fairly well off but there are no literates among them and drinking is very common. The Pallees confine themselves to fishing but Vadas and Jalaris work in the cargo boats in addition to fishing.

#### CORINGA.

This village adjoins Tallarevu and the place was once noted as an important ship-building centre, and for supplying navigators and sailors who manned the vessels trading in the Bay of Bengal and neighbouring parts. The ship-building industry is still carried on on a small scale but owing to the silting up of the bar only vessels drawing less than eight feet of water can be built here, the ship-building yards being situated on the river about ten miles from its mouth. The seafaring people are Pallees, Vadas and Marakans. Pallees are those who are engaged in fishing and Marakans in boat-building and navigation. These people were very prosperous years ago when the place had a flourishing trade. but now they are in a poor condition. Some of them emigrate to Burma where they work as lascars in boats. One of this community who was an enterprising man, emigrated to Rangoon and made a large fortune by engaging in the shipping business, and when he died recently left several lakhs of rupees in trust for charitable work besides a large fortune to his kith and kin. There are very few literates among them and intemperance is also common. Fishing is mostly confined to the creeks and the river, and the sea is some ten miles away from the village. The curers are Vadas and Pallees who employ no hired labour and are not financed by capitalists.

#### MOGALTURU.

Some of the curers are fishermen themselves and cure and sell their catches on their own account. Other curers advance money to fishermen of the neighbouring villages and purchase and cure their fish. Some of the curers borrow money from sowcars at 10 per cent interest and advance it to the fishermen deducting the amount from time to time from the value of the fish supplied by them. No hired labour is used.

#### SORLAGUNDI.

The fishermen of this locality have no proper kind of nets for catching large fish and they prefer catching prawns which they themselves cure.

#### NIZAMPATAM.

There are about 150 houses with a population of about 1,000 who are all Pallees by caste. They are very poor depending mostly on the fishing which they carry on in the creeks and a few of them on cultivation. Before the introduction of the East Coast Railway

they were in fairly well-to-do circumstances as they were engaged in the transport of goods by canal to different centres. This was then an important port and the ruins of godowns of the merchants of those days are still in evidence. Though poor, the people are more cleanly in their habits and some of their children attend the local village school. The curers advance small sums of money to the fishermen to secure their catches and cure the fish themselves without any hired labour. Small dug-outs or canoes made of the trunks of the palmyra are very commonly used in the creeks.

#### KOTHAPALEM.

This village is about two miles from the sea and has a number of salt-water creeks in the neighbourhood. There are nearly 500 houses with a population of about 2,000 who are all Pallees by caste. Most of these depend on fishing and some serve in cargo boats and a few are engaged in cultivation. There are some literates among the elders and about 25 children attend the village school but they are not clean. As the fishing grounds are at some distance from the yard the fishermen carry with them bazaar salt for curing fish which they cannot safely bring to the yard. The ticket-holders do not go for fishing but purchase fish from the fishermen to whom they have advanced money. The ticket-holders in their turn borrow money from sowcars at 18 per cent interest. There is very little demand for fresh fish in the neighbourhood.

#### CHACKICHERLA, THATICHETLAPALEM, MYPAUD AND KODUR.

The fishermen are called Pattapus who are really Pattanavans who have settled down in the Telugu country. They speak a corrupt form of Tamil and Telugu and are simple and law-abiding but their habits are very dirty. They are illiterate and fond of drinking. They have a strong caste panchayat with a hereditary headman. Fishermen are assisted by their women and children in dragging the nets, etc. Their boats and catamarans are constructed by Lubbai carpenters but the caulking is done by themselves. Mostly they themselves cure their catches but there are some capitalists of limited means who advance small sums of money to fishermen and compel them to sell their catches to them. No outside labour is employed.

#### NALATTUR, KOTTAPATAM AND KONDURPALEM.

The fishermen are Pattapus and most of them cure their own fish but there are also some Muhammadan curers who purchase fish from the fishermen and cure them with hired labour. In some of the yards the whole trade is in the hands of the Muhammadan ticket-holders who having advanced money to the fishermen take all the fish brought by them. In the case of fishermen ticket-holders the curing is done by themselves with the help of their women and children.

#### MONAPALEM.

The ticket-holders are mostly fishermen and a few Balijas. The well-to-do ticket-holders are traders who in addition to the local catches also get fish from other villages for curing them here. Hired labour is seldom engaged. Fishermen are very poor.

#### PULIVANCHERIKUPPAM.

The fishermen and curers are all poor. There are some Jonagar and Mudaliyar capitalists who advance sums varying from Rs. 5 to Rs. 30 to the fishermen on condition of their selling the catches to them at 20 viss per rupee which is very low rate, and the capitalists deduct the advances from the price of fish thus purchased by them.

#### IRUKKAM.

The fishermen are of the Pattapu caste and are very poor. There are a few Jonagar capitalists who advance small sums of money to the fishermen on condition of getting their fish at cheap rates.

#### BHIMARPALEM.

The fishermen are of the Pattapu caste and some of the curers also belong to that caste, all being poor, but the influential ticketholders are Jonagars who being capitalists advance money to the fishermen and other curers and secure their fish at a prearranged low rate. The Jonagars thus practically had a monopoly of the industry, and in 1906 when the Pattapus wanted to become ticketholders, they objected to it and there was a riot. The Pattapus cure their fish with the help of their women but the Jonagars employ hired labour such as Pattapu women or Pariah coolies (men and women) who are paid at the rate of one anna per maund of fish.

#### MEDICALKUPPAM AND MANGODU.

Fishermen and curers are fairly well off and are not financed by capitalists or middlemen. Of the ticket-holders some belong to the fisher caste, some are Vannis and others are Lubbais. Hired labour is generally employed almost every day and are paid at the rate of 3 pies per basket of fish.

#### PULICAT AND SATTANKUPPAM.

Fishermen are Pattanavars but the ticket-holders belong to various castes, such as Jonagars, Christians, Panchamas and other Hindus. All of them are of ordinary means and are not financed by capitalists or middlemen. Hired labour is generally employed.

#### CHINGLEPUT AND SOUTH ARCOT DISTRICTS.

There are no fish-curing yards on the coast between Sattan-kuppam in the north and Killai situated in the southern extremity of the South Arcot district near the mouth of the Coleroon, though there is a very large number of fishing villages and some of them containing a large fisher population. This is due to the fact that fresh fish is very much in demand in the large town and villages which are easily accessible by rail, good metalled roads and canal, from the coast. Moreover the sea off this coast is the poorest fishing ground in the Presidency and the small and unsteady supply of fish has not justified the maintenance of fish-curing yards in this region. Nevertheless curing is carried on on a small scale. When fish is landed at night or when comparatively large shoals

are netted which cannot be disposed of as fresh fish, the fisherfolk cure them with bazaar salt in their own houses and send them to the neighbouring markets mostly in a semi-dried or wet condition. As they get a good price for this kind of fish they do not care to place then selves under the restrictions laid down by the fishcuring yard regulations which insist among other things on fully drying the fish for two days before they are removed from the yard. The Peruvala nets (large seines operated from the shore) sometimes land large quantities of nethali and other kinds of small and immature fish and these are simply sun-dried. Fishing is carried on by Pattanavars (Hindus and Christians) and Karaivars who are hereditary sea fishermen, by Sembadavans who are mostly engaged in fresh water fisheries, and to a small extent by Pallees, Pariahs and Sonagars in some of the villages. The craft and implements of fishing are more primitive than those of any other part of the Presidency, and the condition of the fisherfolk is in no way better than elsewhere though they get comparatively higher rates for their catches. Their huts and surroundings are dirty and they are illiterate without any desire to improve their condition. Intemperance is the curse of the community, even babies being made to The caste panchayats are strong among the fisherfolk with headmen whose offices are hereditary. They receive advances of money from fish-dealers and other capitalists on condition of supplying fish at cheaper rates than the market-rate, and they also borrow money from the ordinary money-lenders at exorbitant rates of interest. Labourer fishermen receive small advances of money from owners of nets and boats on condition of their working in those boats, and this is treated as a standing debt which must be cleared before they can go and serve under any The catches are usually divided among the men, a portion going to the owners of the net and boats. These people have hardly any other source of income as they depend entirely on fishing, except the Sembadavans who, in addition to fishing, are in some localities engaged in agriculture, and also, trade in dried fish which they carry to the weekly shandies or markets held in the interior parts. As the demand for fish cannot be met by the local catches large quantities of salted fish are brought into these two districts from the West Coast by rail. In some places near Madras the headmen of the villages receive a fixed annual grant from some fresh fish-dealers on condition of their giving all the "curry fish" (table fish) such as seer, poinfrets, etc., which are landed in their villages, to such dealers during the period of the contract. The price is fixed daily by bargaining, and if there is any outsider who is willing to pay more than what the contractor is prepared to give, the fishermen are at liberty to sell the fish to him, but generally the contractor is an influential man and no one would incur his displeasure by competing with him. All other kinds of fish are sold to any one who offers the highest price, but on every rupee worth of fish so sold the fishermen have to pay half an anna as contribution to the village funds. Usually the right of collecting this toll is sold in auction by the caste headman and is purchased by one of the well-to-do members of the community who in his turn collects the dues every day as the fish is sold on the beach. The funds thus collected by the headman are spent for celebrating festivals in the village temple or other communal purposes. Curing

is carried on by fishermen and hired labour is rarely engaged, but coolies of various other castes are employed for carrying the fish into the interior markets.

#### KILLAI.

This is the only fish-curing yard in the South Arcot district and has only seven ticket-holders; it is situated about seven miles south of Porto Novo. Fishermen are Hindus and their women cure the fish without any hired labour. Most of the fishing is carried on in the backwaters and only for a few months in the sea. The fishermen in this neighbourhood use only dug-out canoes which they import from West Coast, and do not know the use of catamarans. They are mostly poor and depend entirely on fishing though a few of them also own small plots of land. The curing operations are decreasing not owing to scarcity of fish but on account of the increased demand for fresh fish from Chidambaram, Porto Novo, and other towns in the neighbourhood. They carry on their industry without the help of capitalists. The fishermen are more cleanly and not much addicted to intemperate habits.

#### NEIDAVASAL, VANAGIRI AND TRANQUEBAR.

The fishermen are Hindus called Arayanattu Chettis or Pattanavars. They are mostly poor or of very ordinary means, and carry on their trade without the help of capitalists or middlemen. Hired labour is not employed except in days of heavy catches.

#### AKKARAIKUPPAM.

This is a fishing village near Negapatam. Sea fishing is carried on by Arayanattu Chettis or Pattanavars and Saluvars, and the river fishing is conducted by Sembadavars and Karayans. All the fishing communities are very backward and lead a hand-tomouth life without paying any attention to the sanitary condition of their hamlets, education of their children, etc. They make their own nets and catamarans and some of them are also employ in the landing and shipping boats of the port. Their women take the fish for sale into the markets and also do the curing. Only a limited number of the fisherfolk own catamarans and nets, and those who do not possess them are employed by the former as labourers and are paid a share of the catches. These labourer fishermen are under no contract and can serve under any person they wish. The fishermen borrow money from Nattukotta Chettis and other money-lenders on the security of their nets and catamarans at rates of interests varying from 15 to 20 per cent per annum. Fish are sold on the beach to merchants who are dealers in fresh fish, and those not sold to them are taken by the fishermen to the nearest markets or are cured by them, mostly with duty paid salt in their homes. Fresh fish is also sent daily by rail to Tiruvalur, Kuttur, and other places. Only fish that is not readily sold as fresh or those that are landed late in the evening, are taken to the fishcuring yard for curing. Most of the ticket-holders are Pattanava women and a few are Muhammadans (Sonagars) who buy fish from the fishermen and are well-to-do. The fishermen carry on curing operations without hired labour but the Muhammadan curers employ coolies. There are no capitalists and the fish are sold for cash.

#### ARCOT THORAL AND POINT CALIMERE.

Fishermen and curers are mostly poor or of ordinary means but are not financed by capitalists or middlemen. Some of the well-to-do ticket-holders give advances ranging from Rs. 25 to 100 to fishermen on condition of getting their fish at certain fixed rates but no interest is charged on such advances.

#### MUTHUPET.

The ticket-holders are all Marakavars but the fishermen belong to the Karaiyar and Sembadavan castes as well as Sonagars. The ticket-holders are of ordinary means with a capital varying from Rs. 100 to 1,000. They make advances of money from Rs. 25 to 100 to the Sembadavar and Karaiyar fishermen to secure their catches but the Sonagar fishermen do not take such advances but sell their catches on the beach to the highest bidder. The payment of the cost of fish is made once a week. A few of the ticket-holders own boats and nets and conduct fishing with the help of their relatives. Some of the fishing boats go so far as Point Calimere for fishing off that coast. Big fish are slit open and gutted at sea by the fishermen as soon as they are captured, in order to keep them in good condition till they are landed, but most of the fish brought to the yard are in a tainted condition as they are caught at a distance of 7 to 15 miles and much time lapses between the time of capture and the time of their arrival at the yard. "Pit curing" is mostly practised. Hired labour is generally employed and are paid at daily wages according to the nature of the work.

#### ADIRAMPATNAM.

The ticket-holders are Marakayars most of whom are of ordinary means. The fishermen are Karaiyars, Sembadavans, Kadiyars and · Valaiyars as well as Sonagars who are the owners of boats and The boats used in fishing are dug-out canoes costing Rs. 150. to 200 and imported from the Malabar coast. Long line fishing was introduced by Sunnambukkarars some ten years ago and is now more extensively used than hand-lining. In order to minimise the chances of tainting large fish are gutted in the canoes themselves as soon as they are captured. The fisherwomen engage themselves in the preparation of hemp and twine for making nets and in taking fish to the neighbouring villages for sale. Some of the Sonagar fishermen also find employment in the landing and shipping trade. The ticket-holders are the capitalists who control the fishing industry by making advances of money to the fishermen and thereby binding them to sell their catches to them at a rate about 25 per cent lower than the current market rate. Hired labour is generally employed by ticket-holders for transporting fish but they themselves do the splitting, gutting, etc.

#### MALLIAPATNAM.

The ticket-holders are Marakayars in well-to-do circumstances but the majority of the fishermen are poor and are financed by the ticket-holders who are capitalists. The fishermen receive advances varying from Rs. 300 to 400 from the capitalists to purchase boats and nets on condition that half of their daily catches is given to the capitalists in repayment of the sums received as advances. The curing is said to be done without much attention being paid to cleanliness. Hired labour is generally employed for transporting and gutting fish.

#### SETUBAVACHATRAM.

The ticket-holders are Muhammadans who advance money to the fishermen who are mostly poor on the following conditions. Fishermen should sell all their catches to the ticket-holders from whom they have taken such advances, the ticket-holders to fix the price of fish and the accounts to be settled once or twice a year. Hired labour is employed only in days of heavy catches and labourers are paid daily wages.

#### VADAKKAMMAPATNAM.

Fishermen and ticket-holders who are Mussalmans are generally poor. Some of the ticket-holders advance money to the fishermen to control their boats and nets and secure all their catches at 20 per cent less than the current rates. Hired labour is rarely employed and when coolies are employed they are paid at annas 4 per day.

#### PASIPATNAM.

Fishermen are generally poor and are financed by capitalists who are the Mussalman ticket-holders either by loans bearing 18 per cent interest or as advances in agreement to sell all their catches to them at a reduced rate of two annas in the rupee. The ticket-holders monopolise the trade. Coolies are engaged at 3 to 4 annas per day.

#### NAMBUTALAI AND ATTANKARAI.

Most of the fishermen are very poor but the ticket-holders who are Mussalmans are well-to-do and advance money to the fishermen to secure their catches at comparatively low rates. The reason why the number of ticket-holders is so few is that the Mussalman ticket-holders at present control all the fishing boats and as the fishermen are obliged to give up all their catches to the former they could not become ticket-holders and cure their catches themselves. Hired labour is generally employed for curing fish.

#### RAMESWARAM AND PERIATHORAL

Ticket-holders are Mussalmans or Karaiyars and most of them are poor. Two ticket-holders who are well-to-do advance money to the fishermen on condition of their giving all their catches to them at a low price. There is also another rich man who lends money to the fisherfolk and ticket-holders. Hired labour is employed by the rich ticket-holders and others carry on the work themselves.

#### MUKKUR.

The fishermen belong to the Parava caste who were once a very powerful Hindu community who had succession of kings among them with their headquarters at Mongay a famous place of

pilgrimage near Ramnad. They derived much of their ascendency over other neighbouring communities from their knowledge of navigation as well as the profits derived from the pearl fisheries of the Tinnevelly and Madura coast which were practically in their hands. Later on they were much oppressed by the Muhammadan invaders and other rulers of the south, and when the Portuguese arrived "they were found groaning under the Muhammadan yoke and were assisted by the Portuguese on condition of their becoming Christians." The whole community of Paravars along the coast were thus Christianised to the Roman Catholic faith. At present there are some very wealthy individuals of this community who carry on trade and various other business in important towns in India and Cevlon but the majority are poor being engaged in fishing and as sailors in the native crafts of the coast or as boatmen and divers. The fishermen themselves carry on curing at Mukkur and are not financed by capitalists. The labourer fishermen who are engaged in operating the Madi net are paid Rs. 20 to 25 per annum with food. Hired labour is not employed for curing.

#### VEMBAR.

The fishermen are Paravars but the ticket-holders include Paravars and Shanars. They are generally poor and are not financed by capitalists. Fish is sold by auction to the highest bidder for cash payment. No hired labour is employed except in days of very heavy catches.

#### SIPPIKULAM.

The fishermen and ticket-holders are all Paravars. They are mostly poor. Some of them who are of moderate means advance money to others and get an eighth of their catches but no interest is charged. There are no capitalists or middlemen. Labourers who are engaged for fishing are given ½ to ½ of the catches. Hired labour on daily wages is not generally employed for curing, but permanent coolies from 7 to 35 per annum with rations are employed by some.

#### PINNAKKAYAL, ALANDALAI AND OVARI.

All or most of the ticket-holders are well-to-do Paravars some of whom are capitalists and others middlemen. They do not themselves go out for fishing but purchase fish from the fishermen when the catches are landed and auctioned on the beach. The fishermen do not enter into contracts with ticket-holders to supply fish and being uncontrolled can sell their fish to the highest bidder with the result that they get good prices for their catches owing to competition among ticket-holders themselves. Fishermen with no boats and nets of their own give half their catches to the owners of the gear. Hired labour is paid at the rate of 3 to 4 annas per basket of fish cured and permanent coolies are rarely employed.

#### IDINTHAKARAI AND KUTTAPULI.

Fishermen and ticket-holders are mostly poor Paravars. The ticket-holders purchase fish on credit from the fishermen and pay

the price only after the cured fish is sold. There are no middlemen as the ticket-holders themselves are merchants. Hired labour is employed for curing on days of heavy catches and paid at 2 to 3 annas per day.

#### KUTTANGULI.

The fishermen are poor and themselves cure their fish. They sell the cured fish to middlemen who take them into the interior markets for sale. They are not financed by capitalists. Hired labour is employed on days of heavy catches and paid at annas 3 per day.